The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 625.—Vol. XVII. LONDON, SATURDAY, AUGUST 14, 1847. [Price 6d.

DEVONSHIRE.—DESIRABLE FREEHOLD ESTATE,
Midway between Plymouth and Tavistock, with RESIDENCE for a family of respectability;
Also, A COPPER AND TIN LODE,
Which promise to be very productive, with peculiar advantages afforded for working them.

MR. FOOKS is instructed to SELL, BY AUCTION, at the Royal Hotel, Plymouth, on Thursday, the 19th August, 1847, at Two o'clock, the FREEHOLD ESTATE OF HOO MEAVY,
which consists of a most convenient COTTAGE RESIDENCE, with walled-in gardens, lawn and pleasure grounds, detached farm buildings, well-arranged stables, coach-houses, &c., and about SEVENTY-FIVE ACRES of exceedingly good LAND, in a high state of cultivation. There are 30 acres in plantation of forest, fir, and other trees, in a very thriving condition. This property is delightfully situate, at the head of the far-famed Bickleigh Vale, about 6 miles from Plymouth and Tavistock. There is an abundant supply of water to the house and grounds, and the River Meavy flows at the foot of the estate, which is on the declivity of a hill, fronting south. The neighbourhood abounds with game, and the valuable lands of Sir Ralph Lopes, Bart., and Sir Trayton Drake, Bart., abut on this estate.
A COPPER AND TIN LODE
have been discovered on this property, which are a continuation of those lodes now in work in Plymouth Wheal Ysoland, which promise to be *very productive*; and great facilities of conveyance will be afforded by the proposed extension of the South Devon Railway.—Two-thirds of the purchase-money may remain on security of the estate, if required.
Particulars, and map of the estate, may be obtained of Thomas Edge, Esq., solicitor, Clement's Inn, London; Messrs. Darke, solicitor, Launceston; the Royal Hotel, Plymouth; New London Inn, Exeter; on the premises; at the Auction Mart; and of Mr. Fooks, land agent, &c., 1, Serle-street, Lincoln's Inn.

MONMOUTHSHIRE—MINERAL PROPERTY FOR SALE.

TO BE SOLD, BY AUCTION, at the WHITE LION HOTEL, in PONTYPOOL, on Wednesday, 25th August, at Three P.M. (if not previously disposed of by private contract, of which notice will be given), the property of TIR PENTISS, in the parish of TREVETHIN, MONMOUTHSHIRE. This property is freehold, and contains 60, 3, 27 acres—is within two-and-a-half miles of Pontypool. The house and homestead are in good repair. The property is divided and enclosed by good fences; is fertile, and in a fair state of cultivation. There is also a right of common attached. The parish road from Pontypool to Lanhithel passes along. Also, a tram-road to the canal.
This property contains all the well-known coal measures of this rich district, to the extent of 43 ft. in thickness: some part being workable by level, and the whole obtainable within a reasonable distance by pit. The regular ironstone measures also accompany this property.
All information may be obtained by application to Mr. W. Williams, Farmer's Arms Merthyr, the Proprietor; or Mr. B. Beaumont, mineral engineer, Llandaff.

TO BE SOLD—COLLIERY ENGINES, MACHINERY, MINING MATERIALS, &c., in IRELAND, in the Queen's County, between Carlow and Athy, consisting of TWO STEAM-ENGINES, both recently in active work.
ONE CONDENSING, adapted both for pumping and winding, about 25-horse power, cylinder 34 inches diameter, 6-feet stroke, fly-wheel 18 feet diameter, cast metal beam and connecting-rod, double crank, spur-wheels and pinion, with two large quadrants, or bell cranks, with two boilers, one 36 feet long, 4½ feet diameter, with safety valve, the other 18 feet long, 5 feet diameter, &c.
ONE HIGH-PRESSURE ENGINE, of 18-horse power, for winding and pumping, cylinder 18 inches, 2-feet stroke, fly-wheel 15 feet diameter, cylindrical boiler 23 feet long, 5 feet diameter, with valves, &c.
PIT HEAD GEARING, &c.—consisting of pulley frame and engine-shaft shears, metal rope rolls, 200 yards of 4-inch flat-ropes, 2 capstans, 3 flat-rope pulleys, coal boxes, iron tramroads, 3 by 6-inch pulleys, large beam, scales, and weights, a whim, 10 feet diameter, a 3-inch force pump, with 3-inch pipes attached, large brass stop-cock, sundry timber and carpenters' tools, bellows, ladders, anvils, and smiths' tools, taps, dies, &c.; office furniture, a miner's compass, measuring chains, iron waggons, barrows, wire rope, pit chains, 9 and 10-inch pumps, iron cages, a laithe and strap, nail-rod iron, cog-wheels and pinions, fire blocks, and sundry useful colliery and mining implements.
Further particulars may be known, and the property may be seen, by application to Mr. Thomas Johnson, the manager, at the Rushes Colliery, in the Queen's County, situate between Athy and Castlecomer; to John Graham, the clerk of the works there; also of William Brophy, Esq., solicitor, 14, Talbot-street, Dublin, who will receive proposals for the purchase of all or any part of the property described; or application may be made to Joseph Hedley, Esq., C.E., for the same purpose, 29, Bucklersbury, London.

TO BE SOLD, BY PRIVATE CONTRACT, at GODOLPHIN MINES, ONE 24-inch STAMPING-ENGINE, 6 feet stroke, boiler, 11 tons.
ONE 18-inch WHIM-ENGINE, 4 feet stroke, boiler, 7 tons, and cage.
SIX TUBULAR BOILERS, 11 tons each.
A large IRON BALANCE-BOB, 13 tons.
Application to be made to Capt. R. Williams, on the mines.
Dated Godolphin Mines, Helston, Cornwall, August 9, 1847.

TO BE LET, and entered upon immediately, a valuable SEAM of STEAM COAL, of about 200 acres, more or less, situated at OLD SHILDON, in the county of DURHAM. The shaft is already sunk, and a private line of railway connects it with the Stockton and Darlington and Clarence Railways, below the Brusselton incline: there is also a considerable thickness of FIRE CLAY, containing great quantities of IRONSTONE intermixed with it—a sample of which can be seen on the bank—and which, being let with the coal, might together be worked with very great advantage, and is well worthy of the attention of those wishing to embark in such a speculation. CLAY also, for making bricks and draining tiles, is in great abundance, and can also be let at the same time.—Apply to Mr. John Robson, of Redworth House; or to Mr. Wm. Clegginson, of Old Shildon.—August, 1847.

DUDDINGSTONE AND BRUNSTAIN COAL-FIELDS, near EDINBURGH, TO BE LET, as detailed in former advertisements. The SEAMS OF COAL are numerous, and BLACKBAND IRONSTONE may be expected in the lands, similar to that which has been recently discovered at Gilmerton, Dryden, and Greenlaw, in the same range of coal strata. Excellent LIMESTONE is known in the lands.—The near vicinity to the City and Portobello, besides other markets now opened by railway, and also the harbours of Leith and Fisherrow, with all which the existing railway, passing through the estate, connects, renders it now very eligible for colliery operations. There are two steam-engines, and other colliery machinery, at the pits, one of which is nearly sunk to the Jewel Coal.
Offers for a lease to be addressed to Mr. Geddes, 49, Albany-street, Edinburgh.
July 29, 1847.

GLAMORGANSHIRE.—TO BE LET, for a term of years, from Michaelmas next, SEVERAL VEINS of COAL and CULM, known as the CATHELID COLLIERY, situate in the SWANSEA VALLEY, lying under a surface of 400 acres and upwards, within a ring fence, and (by a public railway) within one mile of the Swansea Canal. Distance from the port of Swansea six miles; from the South Wales Railway five; and the Swansea Valley Railway two and a half. The above coal and culm is well known in the Devonshire and Irish markets.
For particulars apply (if by letter, pre-paid) to Mr. David Williams, land and mineral surveyor, Swansea.—July 31, 1847.

STRONG MIXING PIG-IRON.—The YSTALYFERA IRON COMPANY beg to solicit ORDERS for their ANTHRACITE PIG-IRON. This iron mixes well with Scotch pig—imparting to it strength and elasticity, and receiving from it a portion of its softness and fluidity. No. 3 Pig is recommended for mixing with soft iron—Nos. 1 and 2, for machinery castings, requiring great soundness and strength. At this period, when cast-iron is so much employed in the construction of bridges and other buildings, requiring all the strength and elasticity which the best mixture of metal will afford, it may be interesting to call attention to the characteristics of ANTHRACITE PIG-IRON, as REPORTED on by that great practical authority, the late DAVID MUSHET, Esq., M.I.C.E.:—
"It greatly exceeds, in *strength*, in *defective* powers, and capacity to resist *impact*, any iron at this time manufactured in the United Kingdom."
"It now only remains for me to mention a property peculiar to this iron, which was noticed at the time I made the trial experiments, four years ago, but which has been more fully developed in those more recently made. The property referred to is one of *great springiness*, or *elasticity*, which communicates a tendency to the bar, in deflecting and breaking, to resume its rectangular form. Bars that had obtained a permanent set of 2-10ths, when afterwards broken, presented has a slight deviation from a right line; and in no case, did the curvature exceed one-fourth of a tenth."
"It was also remarked, that most of the fractures, in breaking, presented a *regularity of grain* throughout, resembling the structure of *unhardened steel*."
Address THE YSTALYFERA IRON COMPANY,
Dated June 22, 1847. *Near NEATH, SOUTH WALES.*

HOT-BLAST WITHOUT COAL, LABOUR, or REPAIRS.
DIXON AND BUDD'S PATENTS.
Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath.
Dated June 22, 1847.

ADCOCK'S PATENT SPRAY PUMP.—This important INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION at LLANHIDDEL, at pits belonging to R. J. Blewitt, Esq., M.P., Llantarnam Abbey, near Newport, Monmouthshire, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his offices, 157, Strand, London, where pamphlets, descriptive of the invention, may be had; at the office of the *Mining Journal*, 26, Fleet-street; and through any respectable bookseller—price 6d.

PATENT OFFICE AND DESIGNS REGISTRY, No. 210 STRAND.—Inventors are hereby informed, that the Official Circular of Information, detailing the most economical and proper course for the protection of new Inventions and new Designs, and containing the Reduced Scale of Fees, or further information, may be had (gratis) on application, personally or by letter, pre-paid, to F. W. CAMPIN and COMPANY, 210, Strand (corner of Essex-street), London.

VIADUCTS AND OTHER RAILWAY WORK.—The attention of Railway Engineers, Architects, and Contractors is particularly directed to the great advantages to be derived from the application of SEYSSEL ASPHALTE, as the *only impervious and permanent* covering for arches and roofs, and lining of reservoirs, gutters, &c. The arrangements of CLARIDGE'S PATENT ASPHALTE COMPANY enable it to execute works of any extent with the greatest promptitude.
In order to guard against the use of spurious materials, it is important that all applications for works to be executed be made direct to this company; and, as a further protection, it is suggested that Engineers, Architects, and Contractors, should require a CERTIFICATE from the company that the proper description of material has been used.
Information may be obtained as to all works which have been executed by the company since its establishment in 1838, which will prove that the failure of many works represented to have been done with the genuine material has resulted from the substitution of a spurious one.
I. FARRELL, Secretary,
Seyssel Asphalte Company, Stangate, London.

BRETT AND LITTLE'S TELEGRAPH may now BE SEEN in ACTUAL OPERATION through 17 instruments, and coils of wire, equal to 1000 miles, and the simplicity and certainty of the principle proved, to demonstration. A ticket to view will be sent in reply to an application by post.
Furnival's Inn, August 11, 1847.

PARKIN'S LOCOMOTION AND VIADUCT.—The system of LOCOMOTION, of which a full-sized MODEL is EXHIBITED in the GARDENS of the WHITE CONDUIT HOUSE, combines extraordinary ECONOMY and the HIGHEST SPEED, with perfect safety, and will render mining property valuable—hitherto neglected, for want of the means of transit. The VIADUCT is cheap, and can never fail.—For licenses, &c., apply to 21, Paternoster-row.

BRISTOL AND EXETER RAILWAY COMPANY.—Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of proprietors of this company will be HELD (in pursuance of the Act of Parliament) at the White Lion Hotel, in the city of Bristol, on Wednesday, the 1st of Sept., at Twelve o'clock.
The chair will be taken at One o'clock precisely.
JAMES W. BULLER, Chairman.
The transfer books will be closed on Saturday, the 21st of August, and not be reopened until after the said general meeting, on the 1st of September.
Shares in arrear do not entitle the holders to vote, nor are proxies valid, unless lodged with the secretary five days, at the least, before the meeting.
By order of the directors, J. B. BADHAM, Secretary.
Bristol Office, Broad-street, July 30, 1847.

CALEDONIAN RAILWAY COMPANY.—Notice is hereby given, that the next ORDINARY GENERAL MEETING of the shareholders of this company will be HELD in Gibb's Royal Hotel, Edinburgh, on Tuesday, the 31st day of August current, at One o'clock precisely, for the purpose of receiving a report from the directors and on the general business of the company. Also, for the purpose of considering a motion, of which special Notice was given by Mr. Brydges at the General Meeting of 30th August, 1846, and which was postponed at the last general meeting—"That there be a total cessation of traffic on this railway on the Lord's day."
The register of transfers will be closed from the 18th curt. till after the meeting.
J. J. HOPE JOHNSTONE, Chairman.
122, Prince's-street, Edinburgh, August 7, 1847.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.
Notice is hereby given, that the HALF-YEARLY DIVIDEND, at the rate of 12½ per cent. per annum, ordered at the general meeting of this company, held on the 27th July last, will be PAYABLE at the company's offices here, on and after Monday, the 16th inst.
By order of the board, A. C. HOWDEN, Secretary.
Offices, 2, Moorgate-street, London, August 4, 1847.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.
REGISTERED AND INCORPORATED.
Notice is hereby given, that, in pursuance of a resolution of the board of directors, the proprietors of shares in the above company are hereby required to PAY a CALL of TWO POUNDS on each of their respective shares, on or before the 12th day of October next, at this office.—Interest, at the rate of 5 per cent. per annum, will be charged upon all calls remaining unpaid from and after the day above-mentioned; and all shares on which such call shall not be paid, are liable to forfeiture, according to the provisions of the Deed of Settlement.
By order of the board of directors,
A. C. HOWDEN, Secretary.
Offices, 2, Moorgate-street, London, August 11, 1847.
N.B.—It will be necessary to produce the certificates of shares, that the endorsement of the payment may be made thereon.

CORNWALL RAILWAY—HALF-YEARLY ORDINARY MEETING.—Notice is hereby given, that the HALF-YEARLY ORDINARY MEETING of the shareholders in the CORNWALL RAILWAY COMPANY will be HELD in the Assembly Room, at Truro, on Thursday, the 26th inst., at noon precisely.
The transfer books will be closed on the 12th inst., and will not be reopened until the said half-yearly ordinary meeting.
J. T. TREFFRY, Chairman.
Cornwall Railway Office, Truro, August 5, 1847. W. H. BOND, Secretary.

EUROPEAN GAS COMPANY, 39, Finsbury-circus, London.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the proprietors of the European Gas Company will be HELD at the house or offices of the said company, situate No. 39, Finsbury-circus, in the city of London, on Monday, the 30th August inst., at Two o'clock in the afternoon precisely, to confirm the resolutions passed unanimously at the meeting held at the company's offices on Thursday, the 12th inst.—Dated this 13th day of August, 1847.
By order of the directors. J. B. GREAVES, Secretary.

GEORGIA TIN MINES, divided into 2048 shares, and worked *ON THE COST-BOOK SYSTEM.*
The necessary arrangements having been made for carrying out the operations of the company, all future communications are requested to be addressed to the offices of the company, 21, THROGMORTON-STREET, LONDON, where the specimens and plans, with the correspondence, may be seen.

IMPORTANT TO ENGINEERS, MANUFACTURERS, RAILWAY AND STEAM-BOAT COMPANIES.
Messrs. W. & C. MATHER beg to call the attention of the ABOVE PARTIES to their IMPROVED PATENT ELASTIC METALLIC PISTONS.
The PRINCIPAL FEATURE and ADVANTAGE of THIS IMPROVEMENT is
1. Its great ELASTICITY and SELF-ADJUSTING PROPERTIES, which enable it to yield to any inaccuracy of the cylinder, whether oval or taper, and to move with the least possible friction.
2. Its extreme SIMPLICITY and LIGHTNESS, consisting of only two pieces of metal, having the vertical and lateral pressure in due and proper proportion, independent of each other.
3. It takes the LEAST possible SPACE, and is well adapted for air and water-pumps, as it allows of a larger water way.
Messrs. W. & C. MATHER feel confident that it is the BEST ELASTIC METALLIC PACKING yet known, for the above reasons.
Models may be seen at the Salford Iron-Works, Manchester; at W. Barker's, engineer, Newton-Moor; and also at J. Mather's, engineer, Beaufort-street, Chelsea, London.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES, RAILWAY CRANES, FIRE-ENGINES, GAS, &c.
PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION.
These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.
FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.
VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,
Goswell Mews, Goswell-road, London.

TO ENGINEERS, RAILWAY CONTRACTORS, MINING AGENTS, IRONMASTERS, AND OTHERS REQUIRING FINE GREASE for MACHINERY and AXLES of every description.—JOSEPH PERCIVAL'S IMPROVED ANTI-FRICTION GREASE is—after trials on machinery and axles of every kind where constant friction is kept up—admitted to be the most useful, economical, and best preparation of the kind ever offered to the public.
References to scientific and practical men can be given, and testimonials shown of its great excellence.—Samples forwarded on application at the manufactory, Green-street, Wellington-street, Blackfriars-road, London.

SMITH AND ENGLISH (LATE ANDREW SMITH), PRINCES-STREET, LEICESTER-SQUARE, LONDON,
ENGINEERS, MACHINISTS, IRON AND BRASS FOUNDERS, &c.,
PATENTEES and MANUFACTURERS of Improved Steam-engines, Rapid Steam Generators; Railway Wheels, Rails and Chairs, Propellers for Canal and River Navigation.
ROPE-MAKING, FLAX-DRESSING, AND OTHER MACHINERY,
Raising and Lowering Machines, Wharf, Warehouse, and Truck Cranes, Tramway, Traversing and Stationary Purchase Crabs, Tackle, &c.—Also, Steam-engines and Boilers, of various constructions; Bone, Sugar, and Mill Work, and Machinery of every description manufactured and repaired; Saw-mills, Breweries, and Factories attended.
Planing, Boring, Turning, Screw-cutting, &c.

LEAD SMELTERS, AND BUYERS OF LEAD ORES, are hereby informed, that, in future, the DUTY ORES, belonging to the COMMISSIONERS OF GREENWICH HOSPITAL, in the manor of ALSTON, in Cumberland, will be PERIODICALLY SOLD BY TENDER.—Due notice will be given of the sales, and conditions made known, by applying to Mr. Wm. Pauli, the moor-master, at Alston, near Penwith.
JOHN TAYLOR,
Inspector of the Mines on the Estates of Greenwich Hospital.
2, Duke-street, Adelphi, July 30, 1847.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

RICHARD BOOT, ACCOUNTANT, MINE AND RAILWAY SHAREBROKER, COMMERCIAL AND GENERAL AGENT,
REDRUTH.
SHARES FOR SALE in Stray Park, Wh. Tryphena, Wh. Sisters, &c., at a fair market price.

JOHN TREGONING, MINE SHARES COMMISSION AGENT, *HIGH-CROSS, TRURO.*

MINING OFFICES, 1, ST. MICHAEL'S-ALLEY, CORNHILL, LONDON.
WATSON AND CUELL, MINE AGENTS.—N.B.—STATISTICAL INFORMATION furnished (on application) to SHAREHOLDERS in MINES in Cornwall, Devon, Scotland, Ireland, Wales, and Spain.

WILLIAM H. SMITH, MINING SHARE AGENT, 10, *WARNFORD-COURT, THROGMORTON-STREET, LONDON.*

MR. R. TREDINNICK, MINING AGENT AND DEALER IN EVERY DESCRIPTION OF SHARES.
THREE KING'S COURT, LOMBARD-STREET, LONDON.

THOMAS P. THOMAS, MINE AGENT, AND DEALER IN RAILWAY AND OTHER SHARES.
19, *THREADNEEDLE-STREET, LONDON.*
Mr. T. P. THOMAS is a SELLER of Gwinear Consols, at £21; West Wheal Providence, at £18—and is a BUYER of Trehanes, Herodsfoot, Herodscomb, North Pool, & East Pool.

JAMES LANE, MINING SHARE DEALER, 75, *OLD BROAD-STREET, LONDON.*

BRITISH MINING OFFICES, 41, MOORGATE-STREET, LONDON.—PROSPECTUSES may be had, and ORIGINAL SHARES ALLOTTED in the COPPER and SILVER-LEAD MINES connected with these offices, on application to the secretary, THOS. HENRY TAUNTON.

ORIGINAL REGISTRY OFFICE, FOR THE SALE AND PURCHASE OF MINING SHARES.
No. 28, THREADNEEDLE-STREET, LONDON.
SHARES FOR DISPOSAL.

Coombe Mine	Princess Royal
Devon and Courtenay Consols	Pennant
East Wheal Rough Tor	South Wheal Maria
Great Wheal Frederick Tin Mine	Victoria Tin Mining Company
Great Wheal Rough Tor	Wheal Susan
Grambler and St. Aubyn	West Wheal Rough Tor
New East Crowndale	Wheal Ezza
North Wheal Camel	&c. &c. &c.

MONEY.—MESSRS. WINSTANLEY & CO., Sharebrokers, having at their command a very large SUM of MONEY for INVESTMENT, inform their friends and the public, they are prepared to make ADVANCES on the deposits of English or Foreign Railway or Mining Shares, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK at much less commission than usually charged.—6, Bank Chambers, *City*, opposite the Bank of England.

BARossa RANGE MINING COMPANY.—At a Special General Meeting of this company, held at 13, Bedford-row, London, on Tuesday, the 10th day of August, 1847,
The report of the directors was read and adopted, and resolutions were passed, authorising them to invest a limited sum in the acquisition of mineral lands, exempt from royalty, and to acquire other mineral lands on which experiments might be made in the first instance, with liberty to purchase afterwards.
And they were also authorised to make experiments for reducing the ore, by smelting, as they might deem advisable, in order to the economy of carriage and freight.
And a resolution was passed, for subdividing the shares into 6000, of £10 each, instead of 600, and for a call (within one month) of £5 on each original share.
And for such alterations in the constitution of the company as were consequently necessary.

CURRENCY CREEK SPECIAL SURVEY, SOUTH AUSTRALIA.—An ADJOURNED MEETING of proprietors in the above Survey will be HELD at the London Tavern, Bishopsgate-street, on Wednesday, the 18th inst., at One o'clock precisely, to receive the further report of the committee.
August 13, 1847. H. DE CASTRO, Chairman.

COMBMARTIN AND NORTH DEVON LEAD AND SILVER MINES.—Notice is hereby given, that the GENERAL ANNUAL MEETING of the shareholders in the above company will be HELD at the Counting-house, on the mine, on Wednesday, the 18th day of August next, at Twelve o'clock at noon.
Dated Combmartin Mine, July 23, 1847. C. R. WEBB, Secretary.

LLANCYNFELIN MINES COMPANY.—At a Meeting of adventurers, held at the offices, 44, Finsbury-square, on Friday, the 13th inst.,
It was resolved,—That two several special general meetings of the shareholders of this company be called forthwith, for the 3d of Sept. next—the first of such meetings being for the purpose of dissolving, or otherwise, this company; and the second thereof, for the purpose of confirming, or otherwise, the resolution to be agreed to at such first meeting.
BENJAMIN SMART FOWLER, Chairman.

NATIONAL BRAZILIAN MINING ASSOCIATION.—Notice is hereby given, that the THIRD INSTALMENT of ONE POUND per share on the marked shares of this association will be PAYABLE at this office on Wednesday, the 18th inst.
By order of the board,
26, Throgmorton-street, August 10, 1847. JOHN KEMPSTON, Jun., Sec.

WHEAL CURTIS MINING COMPANY.—The shareholders and others interested are invited to attend a MEETING, to be HELD at the Guildhall Coffee-house, on Friday, the 20th inst., at One o'clock precisely, when the affairs of the company and its position will be taken into consideration. JAMES TRUSCOTT.
London, August 10, 1847.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,
23, *HAWLEY-ROAD, KENTISH TOWN, LONDON,*
to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

BRUNTON'S PATENT ORE-DRESSING FRAME.—These FRAMES, for DRESSING TIN, COPPER, and OTHER MINERALS, having been in use, and given satisfaction, on several mines, during the last two years, the PATENTEE begs to call the attention of all Adventurers and Mine Agents to the great advantages, both as regards economy of labour and the great increase of mineral obtained by their adoption. The following gentlemen can certify as to their utility:—Thos. Bolitho and Sons; P. N. Johnson, Esq.; Capt. Jos. Vivian, Cook's Kitchen Mine; Capt. R. Kernick, St. Ives Consols; Capt. R. Edwards, Wheal Franco; Capt. W. Teague, Wheal Grey; Capt. James Miners, and Capt. Matthew Rogers, Carn Brea Mines.

THE PATENT SAFETY FUSE FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the SAFEST, CHEAPEST, and most EXPEDITIOUS MODE of effecting this very hazardous operation. From many testimonies to its usefulness with which the manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c.:—"I am very glad to hear that my recommendations have been of any service to you; they have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."
Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

PATENT GALVANISED IRON AND WIRE ROPE WORKS, *MILLWALL, POPLAR.*
ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each. 48

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY,
26, *CORNHILL, LONDON.*

Capital £500,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to meet other conveniences or necessity.

Assurances for terms of years are granted on the lowest possible rates.

DIVISION OF PROFITS. 49

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EXAMPLES.

Age.	Sum.	Prem.	Year.	Bonus added.	Bonus in Cash.	Permanent reduction of Premium.	Assured may Borrow.
60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 2 3
			1840	116 7 6	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year.

F. FERGUSON CAMROUX, Secretary.

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ACCIDENTS.

Seghill Colliery, Newcastle.—W. Paul was killed by the rollies he was driving.

Gospel Oak, Tipton.—T. Baker was killed while working at Messrs. Walker's.

Burnt Tree Colliery, Dudley.—A. Bryan was killed by an explosion of powder.

Russell's Hall Colliery, Dudley.—P. Attwell fell down the pit, and was killed.

At the inquest, the jury animadverted in strong terms on the impropriety and danger of allowing the shafts of old worked-out pits (of which there are several in that locality) to be thus exposed to the public, and hoped that means would be promptly adopted to compel the parties whose duty it is to place proper coverings over them, and thereby prevent the possibility of a similar melancholy occurrence. The Coroner, at the request of the jury, promised to communicate with the proper parties on the subject. It will be recollected that, a few weeks since, a rumour was raised that a little boy had fallen down a similar shaft at Springs Mire; but, fortunately, however, the report was ascertained to be untrue. We are sorry to hear that these pits are still exposed to the public as much as ever.—*Birmingham Journal.*

Waterskeddings, Oldham.—James Hadfield was killed in the Count Hill Pit.

The late Fatal Gun-Cotton Explosion at Faversham.—The adjourned inquiry into this disastrous accident was resumed at Faversham, on Monday, before Mr. Hinde, coroner for East Kent, and the jury impanelled on the 16th of July. The jury having answered to their names, the Coroner reminded them that the inquiry had been adjourned for the purpose of enabling any of the persons injured by the late explosion to attend and give evidence as to the cause thereof. He would now ask Mr. Chambers, the summoning officer, if any of them were in attendance.—Mr. Chambers replied, that he had several of them present, and they, as well as other witnesses, were accordingly examined. The whole tenor of the evidence went to show that the most praiseworthy solicitude was always manifested by Mr. Hall (the managing proprietor), for the safety of his workpeople, who were exposed to no greater risk than he himself daily encountered; and it was also proved that the man who had the immediate regulation of the temperature in the works was careful and steady. None even of the witnesses who sustained injuries were able to assign any cause for the explosion.—The jury unanimously agreed to the following verdict:—"That the deceased, Henry Topping, was killed by the explosion of a certain gun-cotton factory, but how that explosion arose no evidence appears."—The Coroner said, the jury attributed no blame whatever either to Messrs. Hall (who were present), or to any other person employed in the factory.—The sufferers are going on as favourably as can be desired. The total number of deaths resulting from the accident has been 21. Only 11 bodies have been discovered, the remaining 10 having been blown to atoms: portions of the human frame are still occasionally found in the corn-fields, at an enormous distance from the scene of the catastrophe.

Fatal Accident on the Birmingham and Gloucester Railway.—On Friday evening, as the mail train, which arrives in Birmingham shortly after 11, was travelling at a rapid pace in a cutting near Lifford, the engine ran off the rails, dragging the tender and luggage-van after it with great violence. It continued its course for several yards, ploughing up the earth until it fell over and became powerless for further mischief; but not, unfortunately, until John Warburton, the engine-driver, was forced between the tender and the engine, and crushed to death in a most awful manner. Wilkinson, the luggage guard, most miraculously escaped, comparatively uninjured: he was in the van attached to the tender, in charge of upwards of 30 parcels, many of considerable weight; and, although both ends of the van were smashed in, and himself thrown violently down amongst the goods, he escaped with slight injuries. A first-class carriage, attached to the tender, was partially thrown off the rails, but none of the passengers in that or any of the other carriages were hurt. After a lengthened investigation, before the coroner, the jury delivered the following verdict:—"The jury are unanimously of opinion, that the deceased, John Warburton, came to his death instantaneously, in consequence of the engine and tender, which he was driving along the Bristol and Birmingham Railway, running off the line of railway at about the seventh mile from Birmingham; the same accident having been caused by the engine itself, being of much too heavy a description to be used on the present light road, at the rate at which it was then travelling, and with the light train to which it was attached." During the investigation, the following evidence was given:—Mr. W. Winn (inspector) said, "the weight of the engine was 21 tons, and, knowing her construction, I should say it could not safely be run at a speed of 40 miles an hour. It should not run above 30 miles an hour. The breaking of the chair was the cause of the accident, and that was most probably caused by the oscillation of the engine. Two rails being thus separated, the engine mounted on one of them, and then ran off the rail. I consider that this engine, and all engines of this character, which oscillate considerably, are not safe to work on this, or any other, line of railway. The engine is constructed on a new principle, the boiler being long, and the wheels so placed, as to allow a good deal of overhanging weight. There are two other engines of the same construction in use on this line. Engines of another description, and of the same weight, might have run over the same portion of the line at a speed of 70 miles an hour. The rails on the North Midland Railway are as light as those on the Bristol and Birmingham Railway. Sharp and Roberts's engines, which have not so great an overhanging weight, would be perfectly safe if of as great a weight as 21 tons. My impression of the unsafety of these overhanging engines is based upon numerous accidents which have happened on other lines." —Captain Coddington, of the Royal Engineers, and Government Inspector of Railways, was sworn, and deposed as follows:—"I have this morning examined the spot where the accident happened; the line had been restored at that time. So far as a cursory observation of the line would allow me to give an opinion, the line appeared to be well kept. The question of the capability of the line to bear heavy engines is a matter of opinion; but, in proportion to the weight of the engines, should also be the strength of the rails. There has lately been a tendency in railways to increase the weight of engines, without a corresponding increase in the weight of the rails. Not having seen the chair shortly after the accident, I cannot give an opinion whether that chair was broken by the engine, or whether it had been broken before. The sleeper in which the broken chair was fixed was sound, with the exception of one spot in a situation not material." In answer to questions put by Mr. Barlow, the Government Inspector said that, "from his own judgment and the evidence, he saw nothing which would lead him to believe otherwise than that the breaking of the chair was by one blow of the engine at the time of the accident. He thought that the curve being of so large a radius as 140 chains—equal to two miles—might be regarded as a straight line. He remembered two accidents happening on a more acute curve on another railway, where the engine went off inside the curve. One instance was on the Newcastle and Darlington, about two years ago, and the other on the Edinburgh and Glasgow. In both of these the engine went off the line inside the curve. He had not finished his inquiry, not having seen the engine, and of course not prepared with a report."

Alarming and Fatal Accident at the Earl Granville's Iron-Works, Shelton—Three Lives Lost.—On Wednesday morning, about two o'clock, the townships of Hanley and Shelton were alarmed by a cry of fire at Lord Granville's furnaces, Shelton. Hastening to the spot, the roof of the casting-house was seen enveloped in flames. The Hanley fire-engine was quickly brought to the spot, but was found to be entirely useless, not being in working order. The *Etruria* (Messrs. Wedgewood's) engine came next, and played with great success upon the burning timbers. The *Cobridge* next arrived, but was not needed, as the fire was then (about three o'clock) got under. It is scarcely possible intelligibly to explain to the uninitiated in the process of iron smelting the cause of this dreadful catastrophe; but, from minute inquiries, we have ascertained that the accident originated through not drawing off the melted iron sufficiently soon. The tuyere through which the blast is passed in the furnace, is inserted above the usual surface of the burning matter in the interior, and by a contrivance is supplied with water, to keep the nose, the interior surface of the tuyere, from burning out, the water not actually entering the furnace. If the nose of the tuyere be accidentally burned off, the water escapes into the furnace, and is decomposed by the iron; this liberates the hydrogen, and, of course, causes an explosion. The workmen had been repeatedly cautioned by Mr. Wenn, the foreman, to tap the iron before it rose to the height of the tuyere. On Wednesday, the keeper, the man in charge of the casting, deferred that operation a little too long; and while he, with five others, were preparing to tap the iron, the burning mass rose to the nose of the tuyere, which was burned off, and the water being let in an explosion took place at an opening in the upper part of the furnace, and the liquid iron, like lava from a volcanic eruption, was thrown out with great violence in all directions, covering some of the men who were at work before it. Sheets of the flaming matter were thrown upon the timbers of the roof, which were thus set on fire. There were at the time of the explosion from 15 to 20 men and boys in the casting-house; six of them were dreadfully burned, the remainder escaped unhurt. The scene at this time was appalling—the roof was on fire above, and the bodies of the unfortunate men were burning below. Assistance was obtained, and the sufferers were removed to the infirmary, where three of them expired on Wednesday night. The other three still survive, but are considered in a dangerous situation. The names of the deceased are, William Roden, 19; John Bladon, 14; Thomas Richards, 30. Richards has left a widow and family to deplore his loss. The survivors are Thomas Swift, Thomas Reynolds, and Henry Price—married men. An inquest was held at the infirmary, on Thursday last, before W. Harding, Esq., and a verdict of "Accidental Death" was returned. The worthy Coroner stated, that in future the keepers must be extremely cautious; and that, if any similar accident should occur, traceable to the negligence of any responsible workman, he should feel it to be his duty to commit the party for manslaughter. We understand that relief is being afforded by the noble earl to the widow of the deceased, and to the relatives of the survivors.—*Staffordshire Mer.*

MINERS' WAGES—At the Penzance County Court, on Tuesday last, an action was brought for the recovery of 8*l.*, an alleged balance of wages. It appeared, from the evidence for Johnson Dawe (the plaintiff), that Mr. G. Perry (the defendant), and his brother Richard, had purchased Wheal Venture Mine, situate near St. Ives, and that plaintiff and others had been engaged as owners' account men, and worked for 12 weeks at 1*l.* per week—and had received 4*l.* The defence was, that plaintiff had taken the work as a tributer, and a partner. This was admitted, during three weeks; at the end of which time, and when the defendants bought the mine of Messrs. Batten, a fresh agreement was made, and additional men were put to work.—Verdict for defendant.

BARBADOS GENERAL RAILWAY.—Mr. Statham, the company's new engineer, has arrived in the island, and his prompt appearance and the commencement of his labours, added to the intelligence that Mr. Higginson, of Liverpool, had taken up all the unappropriated shares of the company, had rendered the Barbadians most energetic in their prognostics of soon having the railway in work.

THE GRANITE QUARRIES OF EGYPT.*

The granite quarries of Syene remain a lasting proof of the greatness of ancient Egypt. At that place (now called E' Souan) the Valley of the Nile is traversed by a range of granite rocks, which rises in some places to a height of several hundred feet, forming the barrier in the course of the river which is the cause of the cataract of E' Souan. On either side of this range extends the bare Sahara. The sole elements of the scene are sky and granite. Exposed to the full action of the weather, these rocks are in a state of continual decomposition, and by that process have formed vast heaps of siliceous sand, composed of the crystals of granite in all stages of comminution. Enormous piles of boulders lie about in every direction, but principally in the bed of the river, where the rock appears to have given way to the force of the water, and crumbled down into these fragmentary masses. The rocks lying on the east bank of the Nile are the most compact and solid, and it is here that they have been quarried of those huge blocks which were used by the ancient Egyptains for obelisks, colossi, and other architectural works. These quarries extend for several miles along the granite formation. The cuttings do not penetrate deeply into the substance of the rock; but in whatever part the surface is firm, and without seams, it will be found to have been cut into, and turned to advantage.

Even at the present day, after a long lapse of ages of total abandonment, the operations of the workmen may be traced with the greatest ease. In one part, the fresh surface of the rock shows distinctly where a block of stone was removed; in another, you meet a large obelisk, half detached, and to appearance as if just fallen from the perpendicular, like the less fortunate of Cleopatra's needles at Alexandria; here are long lines of marks produced by the wedges of the workmen, and there heaps of chips, the result and refuse of more minute operations. Without difficulty you might fancy that the quarrymen were but absent at a meal, and would return to resume their works.

The mode of separating the blocks was very simple. Along a certain line of surface a row of wedges was wrought, at intervals, into the substance of the rock, which, after being advanced to the necessary depth, were struck with heavy hammers; a rent was thus formed in the line of operations, and the superincumbent mass being detached, was easily separated by proper levers. This is the very plan now adopted in our own quarries, with the exception, that, in those I have seen in this country—for instance, at Peterhead—the wedges are not applied to the rock *in situ*, but to large masses, which are first detached by blasting. This may suit the Scotch granites, which have a much greater number of seams than the Syenite; but it would never produce an obelisk, even on the banks of the Nile.

The most remarkable circumstance connected with the quarries is, that the surface of the rock exposed in the quarrying is hardly at all discoloured by the long exposure it has been subjected to, and, when compared with a freshly broken bit of rock, presents the full rosy colour of the feld-spar. So striking is this, that on seeing the two compared, one naturally asks himself if these can possibly be the quarries wrought by the ancient Egyptians—that people whose history almost extends beyond the bounds of the legitimate historic ages! As in the case of the tombs of Babes-el-Melook, and most of the earliest monuments of Egypt, the finger of time seems to have respected the works of this extraordinary people: it is only where sacrilegious man has been able to interfere, that desolation has overtaken their all-but-everlasting works. Nearly 4000 years have fled since the Augustan age of ancient Egypt; its civilisation, its dynasties, and its very people, have disappeared from the face of the earth. But these eternal rocks remain to attest the power and greatness of that kingdom, and to demonstrate to him who is willing to learn, that, although to the great bulk of mankind 40 centuries may be all but inconceivable, it is but a drop in the ocean to the countless ages through which has rolled on this, our terrestrial orb.

In order to be able to draw any deductions from the appearance of the Syenite quarries, regarding the progress of discoloration and disintegration, it is necessary to determine the time which they were worked. I do not know that there is any direct historic evidence on the subject; from a number of considerations, however, it would appear to be pretty certain that the quarries of Syene have hardly been in use since the early dynasties of the Pharaohs. The purposes to which the Syenite granite was chiefly applied, were the forming of colossi and obelisks, and the lining and casing of pyramids and some of the propylæa of the temples. Now, all the colossi that are known are of very ancient date. The principal ones bear the names of Amenoph III., corresponding to 1430 B.C., and Rameses II., to 1350 B.C. The greatest number of the obelisks known are works of the Pharaohs of the Rameses dynasty, from 1400 to 1300 B.C. The obelisk at Heliopolis is inscribed with the name of Osirtasen I., who lived about 1900 B.C. There are one or two obelisks which are exceptions in regard to their antiquity, if we may judge by their less perfect style of workmanship and the absence of any ancient name; but these, in all probability, are old Egyptian monuments, which have been dressed over again, and reinscribed in Greek or Latin for some special purpose. None of these spurious-looking obelisks exist in Egypt—that which stands in the Atmeidan at Constantinople, and one or two at Rome, as, for instance, that near San Giovanni in Laterano, are of this description. The great Pyramids, which were cased externally with granite, as well as lined throughout the passages with the same material, are of the time of Suphis—fully 2000 years B.C.—and the immediate successors of that monarch. The only two temples in which I remember to have seen granite propylæa, are one at Karnac, by Osirei I., 1335 B.C., and that of Medinet Haboo, by Rameses III., about 1380 B.C.

Besides these facts in favour of the supposition that the quarries of Syene were wrought principally in the Pharaonic ages, we have negative proof in support of this view, in the fact, that no granite was used in the construction of the temples raised under the Greeks and Romans, and no colossi or original-looking obelisks have been discovered of Ptolomaic or latter date. In further support of this opinion, we find the names of early Pharaohs cut on the rocks in the neighbourhood of the quarries; those of Thothmes III., 1495 B.C., and Psamatik I., 664 B.C. Indeed, it stands to reason that the greatest works of a people should be constructed during the period of their greatest power and prosperity, which, undoubtedly, was that of the Rameses dynasty.

From these considerations, then, it would appear that the quarries of Syene were wrought chiefly, if not exclusively, in the days of the Pharaohs, and, consequently, that the surfaces that were formed in the process of quarrying, and which we have an opportunity of examining at the present day, are of very ancient date.

It is easy to distinguish, by the marks of the tools, the surfaces of the rocks which have been exposed by the operation of quarrying; but they are, moreover, very readily recognised by the marked difference of colours which they present, when compared with the surfaces which have remained untouched. The latter, far from showing any of the pink colour characteristic of Syenite, are covered with a dark brown crust of decomposing crystals—in some instances so loose as to be easily removed by a slight blow of a hammer. The quarried surfaces, on the contrary, are fresh, clean, and compact, and retain the vivid pink of the feld-spar intact. In these respects they agree with the chips, which we must suppose to have been formed at the same time. So very fresh is the colour of some of these surfaces, that it is only on comparing them with a newly-broken specimen that their somewhat darker hue is distinctly visible. There is hardly any difference of colour among the quarried surfaces.

We have thus shown that the quarried surfaces must be about 3000 years old at least; and that, during that great space of time, they have hardly at all been affected by the action of the atmosphere, while the natural surfaces have been greatly acted upon. The obvious deduction from these facts is, that an immense series of ages must have passed away since the rocks of Syene were brought into the position which they now occupy. It is quite impossible to say what length of time has elapsed; estimating it by the very slow progress of the discolouration, it might be 10,000 years, or it might be 100,000. But even these are moderate numbers, compared with what we should be obliged to give, were we to bring into comparison with the surfaces of the quarries the decomposed granite which covers the ground, far and near, to a great depth, and which must all have originally formed part of the solid rock. When a surface exposed for 3000 years has not, in the very least, given way to the influence of the atmosphere, what an inconceivably vast period of exposure was necessary to wear away many feet of solid granite, and especially as that formation, as it occurs in Egypt, is one of the most durable of compound rocks, from its containing so small a quantity of alkaline matter and protoxide of iron.

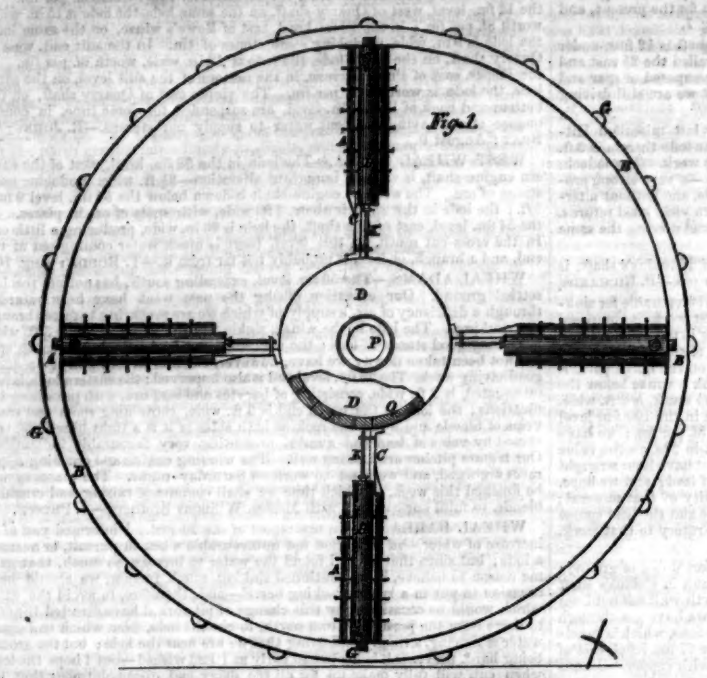
The above remarks receive a striking corroboration from some facts regarding the discolouration of the rocks in the bed of the Nile, at Philæ, and the immediate neighbourhood of the cataracts of E' Souan.

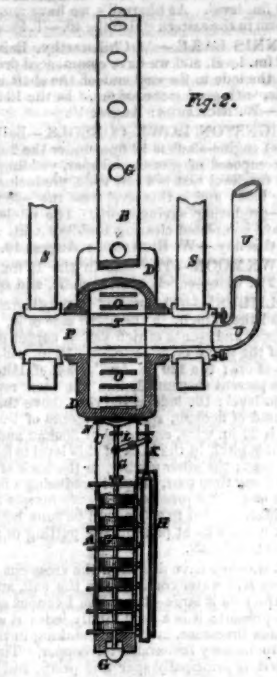
* From a journal by Dr. J. B. Mitchell, unpublished, of a series of travels, with Lord Eastnor, in the Turkish and other dominions—Egypt, Syria, Palestine, the Isles of ancient Greece, &c.—in the latter accompanied also by Mr. Layard.

CAUTION TO WORKMEN—PUNISHMENT FOR NEGLECT OF WORK.—At the Wednesbury Petty Sessions, on Tuesday last, William Woolley, the foreman to Mr. Hill, of Tipton, boiler-maker, was summoned by his master for neglecting his work, and thereby causing serious loss to his said employer. It appeared from the evidence of Mr. Hill, that he is extensively employed by Lord Ward—and that on the 3d inst., Mr. Smith, engineer and colliery agent to his lordship, had particularly requested that certain work might be done by a day named; this Mr. Hill, having consulted with Woolley as his foreman, and receiving his promise that it should be ready, undertook. On the day named, instead of attending to the finishing of the boiler in hand, and which ought to have been forwarded that day, the defendant, after working until 11 o'clock, went off and got drunk, thereby preventing Lord Ward's order from being executed and keeping several men idle. Samuel Rowley, a clerk in the works, confirmed the above statement; and said that, between 4 and 5 in the afternoon, he saw Woolley and some of the men drinking and smoking in a field near the house of the defendant. On making his appearance the next morning, Mr. Hill gave him a thrashing, and sent him off the premises. In answer to questions from the bench, Mr. Hill said, that the consequences to him were of a very serious nature—he had offended and disappointed Mr. Smith—had had two boats returned on his hands, and in other respects suffered much loss. The defendant, who was represented by Mr. Hall, said the "blast pipes were not ready when he wanted them," and besides he was "a piece-master, and could leave when he liked." The bench in giving judgment, characterized it as a very bad case; with reference to the power of the defendant to leave his work when he liked, to the injury of his master's business and his interests, the law allowed no such plea; the sentence of the court would be such as to mark its sense of the gross misconduct of the defendant—he would be sent to Stafford gaol for 21 days, with hard labour.—*Birmingham Advertiser.*

ON THE ARTIFICIAL FORMATION OF SPECULAR IRON: BY T. S. HUNT.—The following is, perhaps, worth recording, as it beautifully confirms Mitscherlich's theory of the formation of this oxide in volcanic products. I precipitated a concentrated solution of perchloride of iron by caustic ammonia, threw the thick magma upon a filter, where it was allowed to drain until it became solid. This was then partially dried at a gentle heat, when it cracked into small angular fragments; these consisted of hydrated peroxide of iron, mechanically mixed with a large quantity of chloride of ammonia. On heating this in a platinum crucible to 400° or 500°, the vapours of water and the ammoniacal salt were abundantly disengaged, and the mass became inflated and porous; the residue, however, was not pure oxide of iron—for on heating it to bright redness, fumes of chloride of iron were evolved, accompanied by hydrochloric acid, and an abundant deposit of dark red-brown oxide of iron coated the side of the crucible. On cooling, the oxide was found coated with a brilliant iridescence, which was still more beautifully seen in the small cavities disclosed on breaking the porous mass. A microscopic examination showed this coating to consist of small scales of specular oxide of iron, which exhibited all the splendid tints of the beautiful irridescent specimens from Elba. The reaction which produced the specular iron, is possibly the following:—A portion of the ammoniacal salt confined in the mass, which was half an inch in diameter, was unable to escape before the exterior became ignited; the heated oxide reacted upon the chloride of ammonia to form chlorids of iron and water. Both of these bodies can, probably, exist undecomposed when in contact with oxide of iron, or at least the oxide and hydrochloric acid, if formed, would immediately react upon each other; but, when they come to the surface, the oxide is deposited, and the hydrochloric acid escapes.—*Silliman's Journal.*

IMPROVEMENTS IN OBTAINING AND APPLYING MOTIVE-POWER.





[Specification of patent granted to Stephen Geary, Hamilton-place, New-road, St. Pancras, architect and civil engineer, for certain improvements in obtaining and applying motive power. Patent dated 8th February, 1847.]

The object of this invention is, to render atmospheric air practically available as a motive power, and thus far does not present any novelty; but the peculiar features of the plans set forth in the present specification are certainly, so far as a judgment can be formed from it and the accompanying drawings, not only different from all others, but give an assurance of ultimate success. The document is in effect as follows:—In the place of the middle or driving-wheels of ordinary six-wheel locomotive engines, are substituted wheels of the peculiar construction hereafter described, to be employed as agents for obtaining power—such wheels having cylinders, pistons, and mechanism arranged in such manner, that the outer extremities of the piston-rods attached to such pistons pass through the peripheries of the said wheels, and in a radial direction from the centre or nave thereof. These piston-rods protrude from the peripheries of the wheels for the following purpose:—Motion being imparted to the said wheels, and their peripheries being in constant contact with the rails upon which they move, as each protruding piston-rod is successively brought into contact with the rails by the rotation of the said wheels, such piston-rod, and the attached pistons, will receive reciprocating motion, and have the effect of forcing the amount of atmospheric air, previously contained in the compressing cylinders, into a suitably placed reservoir, hereafter described. The air-compressing cylinders may be adapted to the purpose of exhausting air from the working cylinder—the pressure of the atmosphere being employed as a motive power generally; in that case, an arrangement hereafter described is made use of. The specification shows the application of this mode of obtaining power to two purposes only; but it is stated that it may be applied generally to all the purposes, and all the cases, where it can be rendered available. The patentee considers it well calculated for locomotion on common roads, as also for propelling vessels, and the working of stationary engines.

In the accompanying diagram, fig. 1 exhibits a partial elevation of the wheel before alluded to, and fig. 2 a transverse and vertical section thereof, taken through the line A B. Other drawings accompanying the specification, but they only exemplify modifications, or applications, of the invention, as exhibited by figs. 1 and 2. A A a series of cylinders (four only being shown in the diagram), one end of each of which is attached to a ring of metal B, which forms the tire of the wheel; and to the opposite end of each of the cylinders A A, there is fixed a casting C, which is firmly secured to a hollow casting D, which forms the nave of the wheel—the several cylinders and castings forming the spokes, by which the tire and nave are connected together, and thereby form an entire wheel. These cylinders, it will be seen from the diagram, are formed of a series of short cylinders, each of which is kept distinct by a casting, or cylinder lid, furnished with a stuffing-box, through which passes the piston-rod C; and each of the several cylinders is furnished with a piston (G), working air-tight therein, connected to the piston-rod. These cylinders may be connected together by bolts and nuts—the junctions being made air-tight in the usual manner. A slide is situated in the slide-box H, and furnished with openings, each of which corresponds with an opening formed in each of the short cylinders. This slide should work air-tight against the face of the openings in the cylinders. K marks a rod, the lower end of which is attached to the slide; this rod passes through a stuffing-box, the upper end working through a guide-plate, as shown—the lower end of the slide is closed, and works through a stuffing-box. L, a lever, having its fulcrum upon a pin, or stud, fixed in the casting C—one end of this lever is connected to the piston-rod G, and the other end to the rod K, by which the slide is moved. N marks a spring, for returning the pistons and slide to their original position, after the contents of the cylinders have been discharged. The casting C is formed hollow, for the purpose of establishing a communication between the slide and the nave D, which has openings O formed therein for that purpose, as shown. P a hollow axle, upon which is fastened the nave D; this axle is formed with journals, which work in bearings, situate in the axle guards S S, fixed to the framing of the locomotive. It will be seen, upon referring to fig. 2, that one end Q of the axle P is formed solid, and the other end hollow; and that there are openings T formed in said axle, through which the atmospheric air passes from the several cylinders A A to a reservoir, suitably placed to receive it. In order that the axle may have free liberty of rotary motion, and a free passage between the cylinders A and the air-reservoir, a connection is formed between all the parts by a hollow elbow pipe U, the lower and bent end of which is formed with a conical-shaped flange, that fits air-tight in a similarly-shaped opening, formed at the hollow end of the axle P, and thus allows the rotation of the wheel. The upper end of the pipe U should be furnished with a valve. The pipe and axle are connected together by a ring and screws (see fig. 2). W marks an opening in the slide-box, for the continual admission of atmospheric air to the cylinders.

Another mode of maintaining the wheel in its proper position in the framing of the locomotive, and, at the same time, allowing it free rotary motion is given; it consists in dispensing with the axle P, and making the conical-shaped end of the hollow elbow pipe U, take its bearing in a conical-shaped seat, formed at the centre of the nave of the wheel, and at each side thereof. Should the pressure of the air-wheel upon the rail be insufficient to effect the necessary compression of the air, an arrangement is shown, by which the pressure of this wheel may be increased; it consists simply in having two vertical rods, the lower ends of which press upon the axle boxes, a thread or screw being cut around the upper part of these rods, which pass through holes formed in the castings, that carry the weight springs of the locomotive or carriage. The engineer, by imparting motion to these vertical rods, is thus enabled to apportion the amount of pressure of the air-whee's. A modification of this construction of wheel, with compressing cylinders, is described; it consists in placing the wheel just described within an annular rim, or tire, of metal, connecting it thereto by side pieces, to ensure freedom of motion to the said wheel, within such annular rim or tire—so that rotation shall cause the outer periphery of the wheel to press against the inner periphery of the annular rim or tire, and actuate the pistons just as in the former case they were actuated by impingement upon the rails. The advantage is stated to be, that by this means a smooth periphery is presented to the rail, instead of one with projecting piston heads, which is desirable for travelling at high velocities. The application of the motive-power thus obtained to locomotive purposes is this—the compressed air passes through the hollow axle into a reservoir suitably fixed, and furnished with a safety-valve (just as in the steam-engine boiler), and from thence it passes into the working cylinder, which, with the driving-wheels, are similar in construction and action to those of the present locomotive; when the reservoir becomes fully charged with air, it raises the safety-valve, and escapes into auxiliary reservoirs, also furnished with safety-valves. If the power is to be obtained by first exhausting the working cylinder, and then using the atmospheric air to actuate the working piston, it is obvious that the arrangement of the slides, &c., of the compressing or exhausting cylinders contained in the wheel, and the other mechanism must be suitably altered.

This invention, as applied to a carriage, is put in operation as follows:—

Motion must be imparted to the locomotive carriage, either in a backward or forward direction, by manual labour, or any other convenient means—this will necessarily give rotary motion to the air-wheels, whereby, after revolution of these wheels, the carriage will be maintained in action, subject, however, to the control of the engineer, by means of the stop-cocks attached to the air-reservoirs. Another plan for obtaining the motive power of atmospheric air, more particularly adapted for propelling boats, working stationary engines, &c., is given; it consists in arranging air-cylinders, such as before described, in a circle, upon a foundation plate, an endless rail or ring of metal is fixed atop, with orifices for the heads of the piston-rods to pass through; common locomotive wheels are made to travel upon this endless rail or ring, and the pressure thereof increased or diminished, by gearing suitably arranged for the purpose; and, by the pressure of these wheels upon the protruding heads of such piston-rods, the air-cylinders are kept in action, as before described, the air so compressed passing into a reservoir placed in the centre of the circle of pistons, from whence a pipe conveys it to the point of application. This machine is set in motion by attaching a crank shaft or handle, and applying thereto manual labour, horse power, a small steam-engine, or any other suitable prime mover. This last plan of obtaining motive power, it would seem, has this in its favour, that should it not be found so entirely successful, *per se*, it will, when applied to a steam-engine, or other prime mover, effect a great saving, by enabling a small engine to do the work of a much larger one.

The claims are stated to be—"Firstly, the improvements in obtaining motive power, by means, or through the agency, of wheels, so constructed that their rotation and pressure on a railway, or other way, by the aid of certain mechanical arrangements, combinations, or adaptations, attached to, or forming part of, the said wheels, shall cause the compression or exhaustion of air, and thus obtain motive power (exemplified by the drawing No. 1, and the foregoing description or specification thereof);—secondly, the improvements in obtaining motive power by means, or through the agency of, an engine, machine, or apparatus, constructed and actuated in similar manner to that exemplified by drawing No. 3" (the arrangement before described as applicable to stationary engines, &c.), "and the foregoing description or specification thereof;—and, thirdly, the improvements in applying motive power obtained as aforesaid, in manner exemplified by drawing No. 2, and set forth in the foregoing description or specification thereof. In each and every case, with such immaterial variations of form, construction, and adaptation of the parts, as experience may suggest."—*Patent Office and Designs Registry*, 210, *Strand*, *Aug.* 10.

NEW SELF-ACTING RAILWAY BREAK.

BY GEORGE STEPHENSON, ESQ.

At the quarterly meeting of the Institution of Mechanical Engineers, held at the Philosophical Institute, Birmingham, on Friday, the 6th inst.—J. G. M'Connell, Esq. (of the North-Western Railway) in the chair,—the following communication from Mr. George Stephenson was read:—

"The various accidents on railways arising from concussions and collisions (and especially the late accident at Wolverton), have induced me to draw my attention to the construction of a self-acting break, which I have for several years had in view—a plan and model of which I have had made, and now lay before the society, with my description of its action and effects. When a railway train is moving at the rate of from 40 to 60 miles an hour, the momentum is so great that it cannot be stopped in any reasonable distance by the breaks at present in use; or if an axle-tree break, or any accident happen to the engine, so as to prevent its progressing, the sudden shake causes the carriages to overrun each other, and those next the engine are almost certain to be crushed. In an accident of this kind, neither the engine-driver, stoker, or guard can be prepared; and before there is time for any of them to put on the break at present in use, so as to be in the least degree effective, the collision or concussion has taken place. When the engine driver shuts off the steam, or applies his break on the tender, the self-acting break is immediately brought to bear upon every wheel attached to every carriage in the train so powerfully, if necessary, as to bring every wheel into the condition of a sledge. I think the train will be brought to a stand by this break in 1-10th of the space in which it can be by the breaks at present used.

My plan is as follows:—I attach a couple of spiral springs to the levers of the break of every carriage, and also connect them with the buffers; and if the carriage requires gentle breaking (which will always be the case when a train approaches a station), the engine-driver, by shutting off a portion of the steam, or applying the break gently, will have complete command over the train, without any of those violent uneasy motions, which are very frequent, and excessively disagreeable to passengers; and as the guard is frequently compelled to apply his break so powerfully as to make the wheels slide on the rail, and cause a considerable amount of wear and tear on the tire of the wheel, by which it becomes flat-sided, and makes the carriages uneasy, and creates a jumping motion on the rail. Suppose a train of carriages moving at the rate of from 30 to 40 miles an hour, and a signal is held out for the engine-driver to stop, the moment he shuts off the steam, the whole of the breaks are brought into instant application of sledging the wheels, which will be more effectual than 50 men applying the common breaks, as the mischief is frequently done before the guard can be apprised of the approach of danger.

It is frequently necessary for the trains to be backed into a siding; when this is required the train will first have to be stopped, and in one minute the whole of the breaks can be disengaged from the buffers, as is shown in the model, and when the train proceeds they are again dropped into gear.

The plan altogether appears so simple, that any ordinary mind can easily understand the whole of it, and I think the cost of putting the breaks on each carriage would not exceed more than from 5*l.* to 10*l.*

Any effectual plan for increasing the safety of railway travelling is, in my mind, of such vital importance, that I prefer laying my scheme open to the world, to taking out a patent for it; and it will be a source of the greatest pleasure to me to know that it has been the means of saving even one human life from destruction, or that it has prevented one serious concussion."

In consequence of Mr. Stephenson's absence, the invention (of which a beautiful model was exhibited) was not discussed, it being agreed that a special meeting should be called to consider the subject.

The consideration of Mr. Buckle's experiments on fan blasts (see *Mining Journal* of the 22d May), now exciting considerable interest, was then resumed. The chief object of Mr. Buckle was, to show that the present fan blasts were imperfect in construction and expensive in operation. He proposed, as the result of experiments extending over a period of nine years, to have a series of fans, revolving in such a way as that the blast of air thrown from one would be communicated to each. He also showed the advantages of having a large inlet pipe; by these means he estimated that not only would the blast be stronger with less horse-power, but it would also be uniform—thus improving the quality of the iron, as well as producing it at a cheaper rate.

Several of the members took part in a discussion which arose on a purely theoretical question, as to the laws by which air was regulated; and at the close, a vote of thanks was given to Mr. Buckle.

Papers on various engineering subjects were then promised by several of the members, and the meeting adjourned.

TERRESTRIAL MAGNETISM.

For many years the tendency of philosophical research has been towards the resolution of the apparently multifarious operations of nature into effects of one general case—results of one universal law. Attempts have been made, and in some instances successfully, to reconcile the seeming discrepancies between the different natural phenomena; and in cases of failure, the impression has been, not that the phenomena are irreconcilable, but that we have missed the clue to the explanation. The relations between chemistry and electro-magnetism, between animal and vegetable physiology, are becoming apparent; astronomy is unveiling the secrets of remotest space; and geology, while explaining the structure of our planet, finds itself dependent on mighty natural agencies, working in obedience to a fixed law. The latter science has often been designated as pre-eminently the science of dreams and vague speculations; but, by the diligent accumulation of facts, such a degree of certainty has been attained, as to enable us to predicate with some confidence on the phenomena which it comprehends. Opinions, it is true, are still divided as to the source of central heat—the cause of volcanic and other disturbances of the earth's crust—some writers ascribing it to an interior fluid mass of fire, others to chemical action; the latter, as before observed, is now but another term for electro-magnetic action.

We have published a brief outline of the history of terrestrial magnetism, confining ourselves more particularly to its operation on and above the surface of the earth. In the present paper, we propose to give a summary of the views entertained with respect to what may be called geological or subterranean magnetism.

Whatever may be the direction of magnetic currents within the earth, it is not permanent on the surface. A chart of magnetic curves requires to be reconstructed every 10 years. Halley was the first to attempt their delineation; and he threw out some ingenious speculations as to the cause of these variations, attributing them to the revolution of a magnet in the interior of the earth. The subject remained in abeyance until 1811, when Hansteen, of Christiana, investigated the phenomenon, and defined the variations of the curves, during a period of 200 years, with geometrical accuracy. In 1576 the needle stood 11° east of north, from which point it returned until 1657-63, when it was due north. Continuing its march, the maximum or westerly declination, 27°, was reached in 1815, since which period it has been again moving slowly to the east. Hansteen supposed the existence of two magnetic poles at each of the polar points of the earth, to whose revolutions the variations of the compass and of the magnetic curves were to be ascribed; but this view has been shown to be untenable. The labours of Barlow, Sabine, and Faraday, have gone far to divest the subject of many of its difficulties. The relation of magnetism to all matter, as discovered by the latter gentleman, is pregnant with important results towards a solution of the mystery: the objection that it was physically impossible for the earth to be a magnet, is now effectually set aside. Gauss of Göttingen, to whom this branch of science is so deeply indebted, computes the magnetic power of each cubic yard of the earth as equal to that of six steel magnets, each of 1 lb. weight. With so tremendous a power, vitalising, so to speak, every inch of the globe, we are enabled to account for the eruptions, upheavals, and other disturbances by which it is visited. The researches of Becquerel and Crosse have demonstrated that minerals, whether earthy or metallic, and crystals, can be produced by weak electric currents; and it is a remarkable fact, that electric currents are found to exist in mines. Wherever the test has been applied to the metalliferous deposits in Cornwall, Wales, on the continent, or in South America, the result is the same. Mr. R. W. Fox has shown, in his communications to the Philosophical Transactions, and other scientific publications, that in the lead and copper mines of this country the direction of the positive currents is generally from east-west; subject, however, to local influences, by which they are sent in the opposite direction, or north and south, where the lodes are parallel. So certain were the indications of the galvanometer in detecting the presence of metallic substances or solutions, that the miners exclaimed, "The little thing knows ore, but doesn't know the country;" the latter part of the observation referring to the absence of movement in the needle when the instrument was applied to non-metallic rocks or earth. Mr. Fox succeeded in magnetising an iron bar, and in one case obtained an electrotype plate by the action of these natural currents. By the same agency he has converted copper pyrites into vitreous copper; and produced artificial veins of carbonate of copper and zinc in a wall of clay placed between the poles of a galvanic series. It appears to be highly probable, he adds, "that the metalliferous veins, and, perhaps, even the rocks themselves, impregnated as they are with different mineral waters, and thereby rendered imperfect conductors, if not exciters of electricity, may have an important influence in the economy of nature."

In a recent number of the Journal, we quoted Professor Ansted's views as to the conversion of granite into mica-schist and clay-slate by the passage of galvanic currents; and Mr. Fox has clearly demonstrated, that by such currents laminæ are produced in masses of clay and other substances. The more recent experiments of Mr. Hunt have extended and confirmed the former in all essential particulars. According to Mr. Evans Hopkins,* who published a work about three years since *On the Connection of Geology with Terrestrial Magnetism*, magnetic currents are continually passing from the south to the north pole, through and around the earth. He shows that the southern aurora, which observation has proved to be accompanied by a similar phenomenon in the north, differs from the latter in appearance, in consequence of the greater amount of vapour produced by the preponderance of ocean in the south. The form is alike in both cases; but the light of the southern aurora is white, while in the north it inclines to red and purple. We read that the saturated or hydrogenous nature of the currents coming from the south pole towards the north, will account for the observed peculiarity of the southern hemisphere in its general temperature, moisture, rains, the growth of vegetation, &c., as compared with that of the northern. Magnetic and galvanic currents are shown to be identical, except that the action of the latter is in some degree restricted to liquids; and, as all metals may exist in solution, their deposition, by means of the currents, admits of demonstration. In this case nature accomplishes on a large scale what experimentalists achieve with the galvanic battery; and, as Mr. Hopkins explains, "If we admit the existence of subterranean currents, and that these exert a slow decomposing power, like that of the voltaic battery, we have a sufficient power for our purpose. In the first place, we have a mechanical tension on the consolidated parts of the rocks, by the linear action of the currents passing through them: and should the intensity of these currents be very great, fractures would ensue more or less at right angles to the direction of the force. These fractures would admit air and water, and thus produce intense heat, by the avidity with which the metallic nature of the bases of the earths and alkalies combines with the oxygen. That nearly all the substances which constitute the crust of the globe are found in solution as well as solid, saturated throughout the rocks, and to such a degree sometimes as to issue out and form springs, is well-known; therefore, judging from the violent effects on a small scale which we are able to produce by experiments, a heat would be engendered quite adequate to occasion all that takes place in earthquakes and volcanic eruptions."

In this way may be explained the formation of veins that have long puzzled the geologist. That it is in obedience to some law, is evident from the general direction of metalliferous and crystalline deposits being the same in different parts of the world. The oblique direction apparent in some instances arises from the form of tension acting at right angles to the line of structure, which is northerly and southerly. The parallelisms are, in fact, most remarkable. Humboldt found the primitive rocks, in which metallic veins chiefly occur, in South America following the same line as those of Germany and England: the same parallelism has also been traced between the upheaved rocks of Russia and Africa. It is assumed that the intensity of electric action increases in proportion as we descend deeper into the earth; and there are many striking effects witnessed in mines, which the existence of electric currents, disturbed by local causes, will alone explain. The heat in mines, particularly those of South America, is not constant; patches which at one time are at a very high temperature, become gradually cold, without any apparent cause, and after a time resume their warmth. The growth of minerals in old workings, as a massy excrescence, is a fact well known to miners; and, in some instances, as observed in Durham, Hanover, France, and in the gold mines of America, when a vein has been worked out, and the galleries left closed, they become filled with solutions of the rocks between which they are dug, and in course of time the deposits thrown down render them again worth the working—the mineral being solid, or in a powdery form, according to the intensity of the current. As is well known, crystals are hardly to be obtained by fusion, but may readily be produced from soft and moist substances; a point admitting of experimental proof, "In order," writes Mr. Fox, "to exhibit the mode of filling, and the formation of different crystals in the same fracture, place a mass of clay-slate between the poles of a battery, immersed in a metallic solution; it will be seen that the currents pass only in the direction of the cleavage. If the slate be broken across, so as to represent veins of fractures, crystals will be observed to grow in each fracture transversely; that is, in the direction of the cleavage planes."

The igneous theory—the doctrine of central fire—has for some time been slowly yielding to other views. All the phenomena attributed to fire may be produced by electro-magnetic currents. It is difficult to imagine the existence of fires unsupplied with the oxygen of the atmosphere; and a singular fact has come to light with regard to the earthquakes in South America, based on observations continued during nine years; the oscillations are from east to west, while the rumbling noise by which they are accompanied travels north and south, showing the influence of some law similar to that by which magnetism is governed. Even the cause of the variation of the needle, mysterious as it has hitherto appeared to be, may probably be referred to the relative energies of the opposing electrical currents, which are, perhaps, subject to occasional modifications; and the appearance of earthquakes and volcanic action from time to time seems to countenance the probability of such changes.

Taking the ocean as the connecting medium between pole and pole, Mr. Hopkins shows to be the universal menstruum whence all the variety of materials that constitutes land is derived. The great ocean currents are from south to north, which, with the upheaval and subsidence of continents and islands, the changes of level continually going on, may be referred to the action of magnetic currents passing from one to the other pole. Everywhere, in fact, there appears to be a tendency towards the north, or pole of decomposition, from whence the decomposed substances are carried back to the south, to take on new combinations, and resume their part in perpetuating the operations of nature. In various parts of the world, the latitude of places is found to be slowly moving northwards, at the rate of from 10 to 20 minutes in a century. It is a generally received fact, that the climate of Europe is colder at the present time than in the earliest periods of history. The first settlers in Iceland described it as fertile in many parts, and covered with trees; and there is evidence that the vine was cultivated where now is nothing but an icy desert. Mr. Lyell observes, with regard to the material diminution of temperature in the northern hemisphere, "we know that there are constantly some small variations in the respective geographical positions." And, it is worthy of notice, that while in the north we find fossils, and other remains of the torrid and southern regions, we never find in the south any but those in the adjacent seas, or peculiar to the locality. In the coal-beds of Melville Island, fossil plants are found which required tropical heat and light for their growth, and could not possibly have flourished through the cold and six months' night of the arctic regions. An island or continent moving from the south would naturally carry its sponges, ferns, corals, and animals to the north, modified by the changes of temperature through which it passed: and the immense deltas of floating wood in process of formation at the embouchure of the Mississippi and other rivers, to be alternately elevated and submerged during their ages of transit, would seem to be the means of providing an endless succession of coal-beds for the inhabitants of the chilly north.

As bearing on this subject, we may notice a paper by Mr. Dana, in the *American Journal of Science*, on the grand outline features of the earth, in which the phenomenon of parallelisms above referred to is ably discussed. The trends of coasts, mountain ranges of various continents, groups of islands, including the Pacific group—5000 miles in length, although thousands of miles apart—are shown to lie in the parallel curved lines. It would appear from these facts, that the geographical distribution of the land is not a confused chance-arrangement, but that the earth has a systematic physiognomy—the directions of the leading lines being north-west and south-east. Taking the earth as an entire mass, it has a facility for splitting most readily in two directions, indicating a rupturing force, and a structure by which the lines have been determined. Necker has shown the coincidence between coast-lines and mountains and magnetic curves; and, according to Sir David Brewster, the lines of magnetic intensity, corresponding with those of equal heat, manifest a mutual dependence of the two phenomena.

This brief sketch of the opinion of scientific men on this interesting subject, places geology and magnetism in quite a new light, disclosing a field of labour that promises a brilliant harvest to the persevering investigator. The wasting away and degradation of the land, which have often been viewed with alarm, are now shown to be compensated for by a process tending to the renewal and perpetuation of the physical universe. We look forward to the labours of Professor Faraday as destined to throw further light on this interesting branch of science, in which he has already done so much. According to Sir J. Herschell, we are to look to electro-dynamics for the *vera causa* of the Newtonian philo-

ophy; and we may borrow the words of that distinguished philosopher in conclusion, and say—"They are secrets of Nature we would fain see revealed while we yet live in the flesh—resources hidden in her fertile bosom for the well-being of man upon earth, we would fain see opened up for the use of the generation to which we belong. But, if we would be enlightened by the one, or benefitted by the other, we must lay on power, both moral and physical, without grudging, and without stint."—*Chamber's Journal.*

* A valued contributor to the *Mining Journal*, and in which his work was specially noticed, and frequently commented upon by correspondents.

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—The main lode, in the 18 fm. level, west end, is worth about 14*l.* to 16*l.* per fm.; the rise, behind this end, is worth about 18*l.* per fm.; in the pitch, working on the north side of this level, the lode is still taking down nearly perpendicular, worth about 8*l.* per fm. The 12 fm. level end west, on middle lode, is worth about 8*l.* to 10*l.* per fm.; the western stope, under this level, on middle lode, is worth about 10*l.* per fm.; the eastern stope is at present poor. We have nothing new to report on in any other part of the mine; the shaft on the slope is going on with all possible dispatch. We are at present shipping a cargo of lead.—T. Angove; G. White: Aug. 6.

BEDFORD UNITED.—At Wheal Marquis, the lode in the sump winze (now 9 fms. under the 80 fm. level) is 4 ft. wide, and still worth 90*l.* per fm.; in this (the 80 fm. level east) the lode is 3½ ft. wide, and worth 12*l.* per fm.; and in the stopes, in the back of this level, the lode is worth 17*l.* per fm. The lode in the 70 fm. level east is 2½ ft. wide—saving work. In the 58 fm. level east the lode is still poor. At Liscombe, the lode in the adit level east is 3 ft. wide, composed of spar, mundic, and ore; and in the rise, in this level, the lode is 2 ft. wide, producing good stones of ore in places. The south engine-shaft is 7 fms. 6 in. under the plat—lode 2½ ft. wide, producing good stones of ore; in the adit level east the lode is 2 ft. wide, composed of spar, mundic, and good stones of ore.—J. Phillips: August 10.

CALLINGTON.—A considerable improvement has taken place in the underlie shaft, at Kelly Bray; we are now 20 fms. deep, just under the gossan; the lode is 5 ft. wide, with a rich branch of black ores 1 ft. wide in the middle; 2 ft. to the south of this is composed of a very kindly spar, intermixed with hard yellow ores, so that we may say the lode is orey, 3 ft. wide; we have cut through the lode 25 fms. deep, and find it from 2 ft. to 3 ft. wide—the orey part is 1 ft. wide, intermixed with black and native copper; the shoot of ore in the shaft is dipping to the west, and we now intend rising to communicate with the same. The engine-shaft is sunk 5 fms. below the level. Dressing-floors are in course of preparation, and operations in this department will be at once commenced. In the 125 fm. level, south of Johnson's engine-shaft, the lode is 1 ft. wide, good saving work; in the rise, in the back of this level, the lode has not been taken down. In the 112 fm. level south the lode is 1 ft. wide, intermixed with silver-lead ores; in the north end the lode is small, producing silver-lead ores. In the 100 fm. level, to the north and south, we are opening tribute ground. In the 90 fm. level no lode has been taken down. At the north mine, in the 100 fm. level, to the north and south, we are still opening good tribute ground. In the 90 fm. level south no lode has been taken down In the 80 fm. level south the lode is small, producing silver-lead ores. No change has taken place in either of the eastern levels.—J. T. Phillips: Aug. 9.

COATLITHE HILLS.—In the level east from A shaft there has been but little done during this week, on account of the air having been so bad, that they could not work; but I hope to get pipes put into it in a day or two, when we shall get on faster than we have lately. The vein in the end is more regular than it was, and I expect when we get farther eastward we shall have it more solid, and we have every reason to expect much better; it is still principally composed of iron, rider, spar, clay, and good stones of ore, producing nearly one-quarter of a ton to a fathom. The horse level has been driven nearly a fathom during this week.—J. M. Paull: August 7.

CUBERT SILVER-LEAD.—The ground in the engine-shaft is much the same as noticed in last week's report. In the 35 fm. level, going west, the lode continues upwards of 3 ft. wide, composed of hard spar, a quantity of mundic, and spots of lead; the eastern end, in this level, is improved, the lode being about 1 ft. wide, good saving work; in the back of the level (35 behind the eastern end), we set on Saturday last a new tribute pitch, at 50*s.* per ton; and, from our survey to-day, we think the men are likely to earn fair wages. In the 25 fm. level, going east, the lode is large and orey, but not altogether so rich as it has been in driving the last few fathoms. Henry's shaft, we fear, cannot yet be sunk on account of water, the ground not being drained sufficient at present. We continue to go on favourably with the sinking of the new western surface shaft.—R. Rowe: August 6.

DEAN PRIOR AND BUCKFASTLEIGH.—In the deep adit level we are still cross-cutting north, to ascertain if any more of the lode is to the north—price for driving 3*l.* 10*s.* per fm., by four men, and two wheelers occasionally. In the 10 fm. level, under adit—that is, 40 fms. from surface—we are still driving on the south part of the lode, which appears to be getting more settled, and has a promising appearance, about 10 in. big—price for driving, 3*l.* per fm., by four men and one wheeler; in the back of this level we have one pitch working just over where we first cut the shoot of ore, at 12*s.* in the 1*l.*, by 2 men. In the past week the men have been desuing the lode, they will commence taking it down to-morrow. In the pitch in the bottom of the 10 fm. level, which I referred to in my last report, the men have given up, and have left the mine; but that is no criterion—it is a piece of ground worthy of trial. In the 20, or bottom level, the lode appears to be making more regular throughout the end, about 12 in. big, composed of capel and spar, with a small string of flookan; there is no doubt, in driving under the hill, that the lode will improve, not only in this level, but also in the levels above; this level being so much deeper, the lode is very much improved and more settled, being of a promising description—present price for driving, 4*l.* per fm., by 6 men and 2 wheelers—the ground is somewhat improved for driving in the past few days. We are getting on with the rings of the water-wheel, the sawing will be completed this day; the walls of the house for fixing in the grinder are up and ready to take the roof, and we are making preparations for laying down the tram road, and the smith is engaged making the tram waggons, which will be completed this week, or nearly so; two men have also been engaged in the past week clearing of the rubble, &c., to open a quarry to raise stones for the walls of the wheel-pit, which will be a great saving in carriage, to have stones so near the works, being in the same field, and stones that will answer the purpose, therefore we shall lose no time to carry the work into effect in all its branches.—H. Choake.

DEVON AND COURTENAY CONSOLS.—The lode in the end at the 30 fm. level east, on the south lode, is 2½ ft. wide, composed principally of spar, peach, and mundic; in the end, driving west in this level, the lode is from 18 in. to 2 ft. wide, composed of spar, mundic, and good spots of ore; in the deep adit the lode is at present small, but producing spots of lead and copper ore occasionally. In the shallow adit level, on the north lode, the lode is 2½ ft. wide, composed of flookan, can, and spots of lead ore; the ground, in the south part of the lode, is very much impregnated with small branches of lead and copper ore. The shaftmen are progressing with the shaft as fast as can be expected—the ground and water being at present rather troublesome.—N. Seccombe: August 10.

EAST CROWNDALE.—The ground in our engine-shaft is very much improved in the past week, having cut what is apparently an east and west lode to the north of the East Crowndale lode; we have not as yet seen enough of its character to state which it is, a lode or a branch, but have cut into it 15 in. and broken some excellent stones of copper ore: whether this be a lode or a branch, its character is very promising; and being a new discovery to us (nothing of it having been seen before at the surface or underground), speaks highly of our prospects, and of our having a productive mine when we cut the main, or Crowndale, lode from our engine-shaft, and which has hitherto been our principal object; the killas in the shaft is very congenial for copper, the shaft down 42 fms. At the Rix Hill adit level we are daily in expectation of cutting the north lode, the ground still continues laced up with spar, and is rather troublesome for driving in—the end is driven 49 fms. Our engine and pitwork all in good order.—S. Paull: Aug. 7.

EAST TAMAR CONSOLS.—The lode in Harrison's shaft, under the 54 fm. level, is 2 ft. wide, producing some good stones of silver-lead ore. The lode in the 54 north is 20 in. wide, fluor-spar and ore—work of a coarse quality; the lode in the 54 south is 18 in. wide—saving work. The lode in the 46 north is 2 ft. wide—fluor-spar and ore; the lode in the 46 south is 6 in. wide, and poor at present; but I expect this will not continue, as there is a kindly lode going down in the level above. The lode in the 38 south is 18 in. wide—work of a good quality. At Charlotte's, the lode in the rise, in the back of the 11 fm. level, is 20 in. wide, saving work—pitches just the same as last reported. Church-lane shaft is cleared up and secured 25 fms.; when this shaft is cleared down to the level with Charlotte's, it will open a good piece of tribute ground, and also ventilate the mine.—B. Robins: August 9.

GREAT MICHELL CONSOLS.—In the 35 fm. level, east of the engine-shaft, the lode is composed of mundic, spar, and stones of ore; in this level west the lode is producing some saving work. In the winze sinking below the 22, west of the engine-shaft, the lode has a very promising appearance, composed of mundic, fluor-spar, and ore—saving work; this winze is now about 12 fms. below the 22 fm. level, in which the lode, from the present bottom to about 6 fms. above, has laid open some good tribute ground.—T. Richards.

GREAT WHEAL MARTHA.—We have now driven west in the 40 fm. level 3 fms.; and, the horse of killas being worn out, we are carrying about 4 ft. of the north part of the lode, which is composed of spar, capel, and mundic, impregnated with ore; there is still a great quantity of water issuing from the end, which shows it to be a hollow lode; in going east, in this level, the lode is divided by the same horse of killas as in the western end; we are driving on the south part, which is 4 ft. big, chiefly composed of spar, capel, and mundic, intermixed with copper, and appears to be improving. In the old mine, owing to the dry weather, the top water is falling off; but we still keep in fork nearly to the 70. I expect, when the lode is drained at the new mine, the water will decrease here, so as we shall be able to resume operations again in the 90 fm. level. At Sherrall's, we have removed the men for the present, and put them in the eastern end in the 40.—T. Penaluna: Aug. 7.

GUNNIS LAKE.—At Chilsworthy, Bailey's engine-shaft is 12 fms. under the 12 fm. level, and we have commenced driving a level called the 25 east and west; the lode in the east end of the shaft is 2 ft. wide, composed of spar and mundic, with good stones of ore. In the 12 fm. level west we are still driving north.—W. Richards: August 10.

HEIGNSTON DOWN CONSOLS.—Bailey's (in my last miscalled Hitchins's) engine-shaft is 12 fms. under the 20 fm. level; the lode therein is 3 ft. wide, composed of gossan and spar, yielding some saving work. The lode in the 20 fm. level east is 4 feet wide, producing saving work—a very strong promising lode; and in this level west the lode is 2½ feet wide, and without alteration—producing saving work. The pitches continue to yield good returns. We have completed clearing Buddle's adit, and commenced driving the same north this day.—W. Richards: August 10.

HAWKMOOR.—The lode in the 15 fm. level, east of Hitchins's shaft, is about 2 ft. wide—capel, spar, mundic, and spots of copper ore.—P. Richards.

HOLMBUSH.—The ground in the diagonal shaft is still favourable for sinking, and the branch, in the north side of it, alluded to last week, is composed of mundic and stones of rich yellow copper ore. The lode in the 120 fm. level, west of the great cross-course, is 16 in. wide, composed of spar, mundic, and stones of ore; the 120 fm. level, east of Hitchen's shaft, on the north part, is for the present suspended, and the men removed to sink a winze below the 110 fm. level; the lode in the rise, above the 110 fm. level south, is 2 ft. wide, composed of flookan, spar, and stones of lead. The lode in the 100 fm. level south is 20 in. wide, composed of flookan and lead, worth 8*l.* per fm.; we have set a new pitch in the back of this level to four men at 8*s.* in 20*s.* on the value of the lead; the other pitches, in the back of this level, that have been wrought on for some time past, are still producing a fair quantity of lead; and we hope, by the end of the present month, to sample a small quantity of that mineral; the winze, alluded to above, will be sunk between the slide and the lead course by six men, who at present are putting in a dam, preparatory to that work.—William Lean.

ILAM.—We have driven in the cross-cut since last report 5 feet of ground; we have still water coming from the end, and we have sunk in Robins's shaft 4 ft.; the lode is large—how large I cannot say, as the north wall has not been cut at present; it is a very kindly lode; it appears that we have got through the black limestone, and we are sinking in the grey limestone, which is considered to be very favourable for copper. The lode in the 67 fm. level, east of the shaft, is principally spar and prian, and intermixed with copper.—James Sprague: August 9.

KIRKCUDBRIGHTSHIRE.—Having so far cleared the stuff, we, yesterday, measured the bargains for the past month, and set as follows for August:—The lode in the 40 end west is 3½ ft. wide, worth about 5*l.* per fm.—set to six men at 3*l.* 15*s.* per fm. The lode in the 30 end west is upwards of 4 ft. wide, having no north wall, and is worth 9*l.* per fm.—set to six men at 4*l.* 10*s.* per fm. The lode in the 20 end west is 3 ft. wide, worth 6*l.* per fm.—set to six men at 3*l.* 10*s.* per fm.; also set stopes in the back of this level to eight men at 1*l.* 10*s.* per fm. These backs are not looking so well as I have seen them—worth now about 5*l.* to 6*l.* per fm.; and we have set the winze under the 30 west to six men at 3*l.* per fm.; nothing has been done in either of these winzes since last report. The lode in the shaft sinking under the 40 fm. level is 3½ ft. wide, producing stones of lead. I am happy to say, we have now a full supply of top water, and are going on briskly in clearing stuff; but I consider it will require the greater part of the coming week to clear the mine properly, when we propose setting more stopes in the back of the 30. We are promised a vessel to be sent up the Palnure river to ship our lead on Monday next.—J. Buzzo: Aug. 7.

LEWIS.—The lode in the 60 east is 6 ft. wide, worth 17*l.* per fm. for tin, and very promising; the lode in the 60 west is suspended, in order to put the men to raise at the back of the same level, about 2 fms. behind the end against Caple's winze sinking below the 50. The lode in the 50 east is 3 ft. wide, worth 7*l.* per fm. for tin; the lode in the 50 east, on south branch, is 15 in. wide, worth 10*l.* per fm. for tin. The lode in the 40 east is at present in a very disordered state, by the intersection of a cross flookan; we are also driving a cross-cut south in the 40 from copper ore shaft, to cut middle lode under the bottom of the 30, that was worked last month at 8*s.* tribute. We have resumed the cross-cut in the 30 south from Wheal Cook shaft, towards Bosworgie Town lode—ground favourable. We have stopped several of our tribute pitches, until we can return some of the tinstuff now at surface; we have now only seven pitches at work, at an average tribute of 3*s.* 6d.; two at the back of the 60, and five at the back of the 50.—S. S. Noell: August 7.

LLANCYNFELIN.—According to Mr. Johnson's instructions, I beg to hand you the report of these mines. With respect to the ground opened on the main lode there is not any left standing that will pay for breaking down, with the exception of what is already working at the back of the 8 fm. level by two men, at 5*l.* per ton; at this point there was a good lode for about 15 fms. in length, occasioned by three branches falling together. The 18 fm. level is driven on the course of the lode about 160 fms., and very poor indeed, varying in size from 4 in. to 3½ ft. in breadth, and cross-cutted at right angles sufficiently to prove that there are no more branches in connection with this lode; on going west, the lode is disordered by a slide course, and consequently lost, or rather not discovered to the west of this slide—here I should not recommend any more outlay. In the 18 fm. level, I think it would be well to extend the eastern end from Johnson's winze under the old men's workings, to see if there is anything gone down in that direction. On examining the lode in Jenkins's adit, I find the lode to be about 2 ft. wide, composed of spar, prian, and good stones of ore; there are also two middle lodes which form a junction with this lode, all underlaying towards Fearon's shaft, to the 20 fm. level, and cross-cut to the nearest lode, then extend levels on each as should then be thought advisable. Jones's adit is driven about 70 fms., and in order to cut Jones's lode there are about 120 fms. more to drive, which will leave a back of about 18 or 20 fms.; in passing this distance, it is expected to intersect two other lodes which have not yet been wrought upon; the ground in this cross-cut is very favourable for driving; this I consider a fair speculation, and worthy of a trial. I have carefully examined all the stamp stuff lying on the mine, and should consider it would pay for stamping, and leave a small profit; it has been represented by the farmer of this estate, that an important discovery was made some years since in ploughing the land; and as we have an intimation as to the spot, I should deem it essential to trench in this part, as well as to the north of Fearon's, where there are lodes possessing good indications—this would be attended with but little expense. In conclusion, I beg to remark that the machinery is well adapted for exploring the mine to a considerable depth, and in a position suitable to command the operations at Fearon's.—E. Rogers: August 5.

MENDIP HILLS.—The lode in the 38 fm. level, south of Stainsby's shaft, is not quite so large as it has been, its present breadth being about 3 ft. 6 in.—composed chiefly of flookan with a branch of soft white spar, impregnated with lead near the foot wall; the lode in the winze, sinking below this level, presents a more favourable appearance than we have seen it for some time before—composed of flookan, quartz, iron, and cakes of lead in places, with two very regular walls. In the slag department we continue to progress very favourably with our different operations; the beds of slag, from which we are now removing the top rubbish, look well. I hope to get the water-course completed in the proposed site, for smelting, washing, &c., by to-morrow evening, the entire length will be about 1000 fms.—F. C. Harpur: August 9.

SOUTH TAMAR.—The shaftmen have completed the timber work and footway to the 50 fm. level, and are now making preparations for dropping the lift under the said level. The men in the adit level are still getting on very satisfactorily in clearing and securing the same.—B. Robins: August 9.

TAVY CONSOLS.—There is an improvement in the 24 fm. level—a foot wide is composed of peach and ore; the ore of very good quality.—A. Martyn.

TRELEIGH CONSOLS.—In the 110 fm. level, east of Christoe's, the lode is 18 in. wide—rather promising, with stones of ore. In the winze below the 100 east, the lode is 18 in. wide, and worth 5*l.* per fm. In the 100 cross-cut, north of Garden's, driving north towards the lode, we have cut a branch of spar and mundic yesterday, 4 in. wide. In the rise, above the 90 west, the lode is 16 in. wide, and worth 6*l.* per fm. In the 80, west of ditto, the lode is 20 in. wide, and worth 10*l.* per fm.; in the 80, east of ditto, the lode is 1 ft. wide, and worth 14*l.* per fm. On a branch in the 70, west of ditto, the lode is 10 in. wide, but little mineral. In the 60, west of ditto, the lode is 3½ ft. wide, producing good stones of ore—more promising. In the adit east, on Wheal Parent lode, the lode is 20 in. wide, producing stones of ore—not to value. The east shaft, below the adit, on Wheal Parent lode, commenced sinking yesterday: we have not taken down the lode.—W. Symons: August 7.

UNITED HILLS.—In the 90 fm. level, eastern end, the lode is 3 ft. wide, worth 5*l.* per fm.; in the western end the lode is 4 ft. wide, worth 10*l.* per fm.; in the stopes the lode is 2½ ft. wide, worth 20*l.* per fm. In the 80 fm. level, eastern end, the lode is 3 ft. wide, worth 6*l.* per fm.; in the west of cross-cut the lode is 2 ft. wide, worth 12*l.* per fm. In the 70 fm. level, east of eastern shaft, the lode is 2 ft. wide, worth 4*l.* per fm.; the lode in the shaft is 4½ ft. wide, worth 6*l.* per fm. The 60 fm. level is suspended since August last; the shallow adit was suspended last month. At Wheal Charles, in the 50 fm. level, the lode is 2½ ft. wide, poor. At Wheal Sparrow, in the 40 fm. level, the lode is 15 in. wide, worth 2*l.* 10*s.* per fm. In the 30 fm. level east, on Stacey's lode, the lode is 2½ ft. wide, worth 15*l.* per fm.; in the west of Turner's shaft the lode is 1 ft. wide, producing but little ore. In the 20 fm. level the lode is small and unproductive; in the adit level the lode is 18 in. wide, producing some stones of ore.—T. Trevenen; R. Williams: Aug. 10.

WEST WHEAL JEWEL.—The rise in the back of the 70 fm. level, west of Hodges's cross-course, on Wheal Jewel lode, is 1 ft. wide, with a promising appearance, producing some good ore. In the 30 fm. level, west of Hodges's cross-course, on Tolcarne tin lode, the lode is 18 in. wide, worth 5*l.* per fm. In the 12 fm. level, west of Quarry shaft, on the same lode, the lode is 15 in. wide, worth 8*l.* per fm.; in the 12 fm. level, east of Rowe's winze, on the same lode, the lode is 9 in. wide, producing some stones of tin. In the adit end, west of Quarry shaft, on the same lode, the lode is 18 in. wide, worth 6*l.* per fm. In the stopes, east of Pryor's winze, in the bottom of the adit level, on the same lode, the lode is worth 20*l.* per fm. The stopes east of Quarry shaft, on the bottom and back of the 12 fm. level, are suspended for some time, in consequence of not having sufficient water to supply our stampa.—R. Johns; T. Bray: August 9.

WEST WHEAL MARIA.—The lode in the 38 fm. level, west of the eastern engine-shaft, is without important alteration—3½ ft. wide, producing good stones of ore. The western engine-shaft is down below the 54 fm. level 9 fms. 2 ft.; the lode in this shaft is about 3 ft. wide, with spots of ore in places. In the 54 fm. level, east of this shaft, the lode is 20 in. wide, producing a little ore. In the cross-cut south, in this level, there is much water coming out of the end, and a branch, or lode, is probably not far from it.—T. Rodda: Aug. 10.

WHEAL ADAMS.—The 50 fm. level, extending south, has not yet reached settled ground. Our operation during the past week have been retarded through a deficiency of air, a supply of which we are preparing to force through the workings. The lode in the winze, sinking in the 40 fm. level, is 3 ft. wide, producing good stones of lead; the western silver-lead lode, in the south end, has not been taken down; we have, however, cut into it, and find it produces good saving work. The 28 fm. level end is also improved; the eastern lode, lately intersected, is 2 ft. wide, consisting of barytes and lead ore, with promising indications; the lode in the north end is 3 ft. wide, containing spots and small veins of blende and lead; the rock on both sides of it is a light blue slate, traversed by veins of lead and quartz, presenting very favourable indications. Our tribute pitches are looking well. The winding engine and crushing apparatus are fixed, and were set to work on Saturday night. The masonry will be finished this week, at which time we shall commence raising and crushing blende, to fulfil our contract with Messrs. Williams Brothers.—J. Prince.

WHEAL BARBARA.—In my report of the 2d inst., I informed you of an increase of water—an indication not unfavourable when in pursuit, or nearing, a lode; but since that date, I found the water to increase so much, that gave me reason to believe, if we continued sinking much further, we should have occasion to put in a larger working barrel—and, therefore, to avoid the delay which would be occasioned by this change of pitwork, I have directed the men to drive from the present bottom north, to cut the lode, from which end much water is flowing, strongly indicating that we are near the lode; but the ground being hard, prevents it being cut so early as I had wished—but I hope the lode, when cut, will fully make up for all the delay and disappointment that has been met with. From the lode in the adit level, only 4 fms. below surface, it is only fair to expect a lode in the 10, that will give encouragement to the company for further and more spirited prosecution; and it is my firm conviction, notwithstanding that this lode under adit is sought after in the particular spot where the shaft is sunk, that there will be found to the east a lode of equal, if not of greater, importance—and, on the whole, it may be said, that the mine is worthy of a spirited and judicious outlay, in view of a return, that is very likely to answer the purpose of the parties engaged therein.—H. F. Stephens: August 10.

WHEAL SOPHIA.—We have sunk Boundy's shaft 10 fms., and the ground much the same as last reported, with branches of spar and spots of copper ore dipping towards the Greston lodes. The lode in the adit level looks very promising, about 6 ft. wide, composed of capel, spar, mundic, and good stones of copper ore. After our sinking to the adit level we shall be able to get on with more force, and drive a cross-cut south, to intersect the Greston lodes, by which we may expect to raise a quantity of ore.—H. Luke: Aug. 9.

FOREIGN MINES.

ANGLO MEXICAN MINES.—*Guanaxuato, June 25—Asuncion.*—The following are the particulars of the last month:—

		Memoria.	Sale.	Loss.
May	22	$ 562 5 7	$ 922 0 0	$ 121 5 7
	29	545 5 6	803 0 0	141 1 6
June	5	397 7 6	361 3 0	217 2 0
	12	385 4 6	427 1 0	172 0 0
	19	460 7 9	461 6 0	230 0 9
		Total loss on the five weeks		$ 885 1 10

During the five weeks the mine produced 480 cargas of ore, which, selling for $ 2275 2, shows that the average price was 3*l.* 1-5th per carga. This is a heavy loss, and I do not know that we are justified in expecting much better results for the future; for the mine in its present state, without having the advantage of extension of main headings, or, in other words, having been without works of speculation or exploration for a very long time, cannot be expected to yield much more available products: I am grieved with myself for not stopping it altogether, and giving it up to its owners; last Monday I went up with the determination of giving Mr. Parkman orders to suspend all operations whatever, but I fear he has over persuaded me to go on for another month—just as we were about to abandon the San Casimero quarter of the mine entirely, a slight "pinto" began to show itself; and this, added to my own disinclination to withdraw from the mine, has induced me to consent to another month's working, but under a strong protest for increased rigid economy, so I trust the board will pardon us this additional endangerment of money and time.

Sirena.—We get nothing whatever from this mine, and never shall again extract another dollar from it, I fear.

Haciendas are not now in demand; therefore, I am thankful that we got them let in the manner we did.—Mr. Brough advises having remitted to Mexico $25,000, for the purchase of bills on England, which may be expected to come forward by the next packet.

IMPERIAL BRAZILIAN MINES.—*Gongo Soco, June 3.*—I am sorry the Gongo Mine presents nothing new or important. A Bananal, sufficient accommodation for 25 Englishmen, and 100 labourers, will be ready by the end of the month, by which time also I hope the mine will be nearly, if not quite, drained. You may rely, that every economy, not inconsistent with getting the mine into a working state as early as possible, is most rigidly practised; but as there was only one habitable house on the property, and the machinery had been worked to the last moment it would endure, and the mine sunk to the lowest practicable point, before the parties would consent to part with it, without the preparation of anything presently available (though there are many things which will be found eventually very useful), we have had to do a great deal, and have much yet to do, and which has been, and will continue to be, expensive for some time.—W. J. Henwood.

Gold workings for 17 days, from May 14 to June 2—8 lbs. 3 ozs. 11 dwts.

NATIONAL BRAZILIAN MINES.—*Cocaes, June 4.*—Our present aim is to lay open a portion of the eastern ground as quickly as possible, and for which purpose there will be an eastern end driven below the head wall of the lode, towards Irving's former workings, for there have been some promising samples taken at the Cavoca shaft; the line of which veins is, doubtless, a considerable distance towards the east from any of our present working points. The veins just mentioned crossed the Cavoca shaft about 3 fms. above the bottom of the shallow adit level; and to intersect them is, no doubt, the purpose for which the Cavoca shaft was sunk.

Cuiaba.—We have much pleasure in handing you, by this opportunity, our report on the Cuiaba Mine. Looking at the circumstance of the small force which has been employed on it during the last few months, from the quantity of work which has been done to bring the mine to its present good working order, and at the present prospects at the Quebra Cunha stopes, where we have scarcely commenced working on the lode, but have hitherto been taking away the refuse stone left on them from the time they were last worked—that you may rest assured that something very good will yet be done at Cuiaba. The produce of the past 10 days, which has been obtained from a very few loads of stone, will, doubtless, serve to corroborate the promises held out to you on this piece of ground; and we feel confident that much better returns will yet be obtained from it.

		Mks.	oz.	ots.	grs.
Produce.—Cocaes, 24th May		7	4	3	5
Ditto, 3d June		6	6	2	9
		14	2	5	14
Cuiaba, 7th May	3 0 0 2	6	1	1	30
Ditto, 17th May	3 1 1 28				
For 17 days		20	3	6	44

ST. JOHN DEL REY MINES.—Accounts have been received from Morro Velho, to the 28th May, particulars of which will be given in our next.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

Carthew United.—The proprietors gave a treat of meat and plum-pudding to the miners and workmen on Saturday last, on occasion of an important discovery in the new (Gray's) lode in these mines.

East Crowndale.—The prospects here, within the last few days have materially improved, having cut a north lode in the shaft, from which some very fine stones of ore have been broken; in course of a few days I shall be prepared to give some further information on the discovery, especially if it proves valuable.

East Pool.—In reply to your inquiries respecting this mine, I have much pleasure in informing you that the 80 end will turn out 10 tons per fm. The winze sinking under the 70, some fathoms west of the 80, is 2 feet wide, ore. The 90 end is 50 fms. behind the 80, showing indications of the same sort of ore. We find the tin ground which we have is riding the ore, and will, from all appearance, be entirely cut out by the ore. The ore is dipping east, as we see symptoms of the same in every deep level in the eastern part of the mine.

— A considerable improvement is reported here. The lode in the 80 fm. level is said to be turning out 10 tons per fm., whilst the deeper are coming under the ore ground.

Herodsfoot.—The 82 (bottom level) is worth 20*l.* per fm.; this is richer than any level above, clearly showing the lode improves in depth; we, therefore, hope the agents will lose no time in getting down the shaft to another level, and a good and lasting mine may be calculated on.

Ryalton.—According to promise, in my letter of Saturday, I beg to state I have this day been underground at Wheal Ryalton, and am proud to tell you that there is a very great improvement; the lode in the 20 fm. level is altogether changed, and is coming in contact with an east and west lode; it has made some very fine stones of lead, much better than we have ever seen be-

fore; the lode is 2 ft. wide, and the ground can be driven for 30s. per fm.; we only cut into the lode on Saturday last, and cannot say much about what quantity of lead it is likely to make; but I think this discovery is one of great importance—we shall be able to see more of it in a week, when I will write to you again.

WHEAL TRELAWNEY.—An arrangement, we are informed, has been made between this mine and Trehane, by which the latter, on payment of 16*l.* 10s per month, is to have all the water required for dressing ores, and flat-rods from Trelawney engine to work Kelly's shaft, in Trehane. The Trelawney adventurers, in Trehane, are to have the liberty of working their north ground through the Trehane levels. The mutual advantage of this will be at once apparent; at Trehane it will save the expense of an engine, and enable them to raise more ore, and dress large quantities, which before has been impossible for want of water. To Trelawney it gives the great advantage of making the ore in the north ground immediately available, and will also save the expense of machinery. Both mines are looking well; and, with better times, we may expect to see a great advance in the price of shares.

BAROSSA RANGE MINING COMPANY.

A special general meeting of the shareholders was held at the offices, No. 13, Bedford-row, on Tuesday, the 10th inst., pursuant to advertisement.

The notice convening the meeting having been read, and the objects for which the shareholders had assembled having been briefly adverted to by the CHAIRMAN, the report, prepared by the directors, was then read, of which the following is an abstract:—

REPORT.

The directors in their report stated, that they had convened the meeting for the object mentioned in the second resolution of the first annual general meeting, and for the other purposes mentioned in the advertisement.

They had received no advices from Captain Rodda of later date than the 4th of December last; but they had other intelligence.

In Captain Rodda's report of the 4th of December last, he gave, on the whole, an unfavourable account of the site chosen for the first operations, although he thought it desirable to test certain lodes in the neighbourhood, by driving adits, &c.; but he strongly urged on the directors to procure a sett of some lands in Lynedoch Valley, belonging to Mr. Angas, immediately adjoining lands of the South Australian Company, and in which that company was working a copper mine. There being a question whether those lands belonged to Mr. Angas or the South Australian Company, great delay and difficulty has arisen; but the directors were happy to be able to state, that the lands had been conceded to Mr. Angas, and that the company would have from him a sett of them, upon the same terms as their original grant. The course of the lodes now being worked by the South Australian Company was through the lands comprised in this new sett; but inasmuch as it appeared highly convenient to work the lands of the South Australian Company in conjunction with those of Mr. Angas, the directors applied to that company for a grant, and had succeeded in obtaining a promise of it.

Captain Rodda had inspected the operations of the South Australian Company on the spot in question, and reported on it, on their behalf, in a highly favourable manner; and that company, from its colonial advices, was under the impression that the minerals are of very great value in that locality. Some samples of ore assayed by Captain Rodda, he reports, yields 50 per cent. One of the members of the Board of Supervision, established in the colony, had recently arrived in England, and his detailed communications to the directors give them confident hope that the operations of the company in this direction will be highly lucrative. The intimate acquaintance of that gentleman with South Australian mining in general, has been of great service to the directors, and has enabled them, with confidence, to recommend the scheme of operations, indicated in their report. In the 11th report of the South Australian Company, which has been just published, the following passage occurs as to their mineral lands in Lynedoch Valley:—"Besides the mineral lands in the Mount Barker district, two other sections, at least, of the company's lands, selected solely for their superior agricultural properties, contain copper ore. From one of these, in Lynedoch Valley, a small lot, of 6 cwts., was sold at Swansea on the 24th inst., at 17*l.* 16s. per ton; in regard to which, our agent there reported—'it is a very pretty sample of ore; it embraces all the favourable appearances that a mine could wish for, and indicates great prospects of abundance of copper.' The colonial manager is of opinion, that the lodes found in that section run through the company's property there, which amounts to 4000 acres." Seeing that the original site has not answered Capt. Rodda's expectation, it was very satisfactory to the directors to be able to announce, from a letter of Mr. J. H. Angas, in the colony, that he and Capt. Rodda have obtained a sett of a copper mine at Greenock Creek, which was in course of working; and they very shortly expected to make a shipment of copper ores in aid of the expenses. There would, therefore, have been no great delay, after the arrival of Capt. R. in the colony, of finding him and the miners profitable occupation; and the gentleman above alluded to, as one of the members of the board of supervision, had given the directors a very satisfactory report of the mine at Greenock Creek.

The company would thus be in possession of three distinct sites, all of a very eligible character, sufficiently contiguous to each other to admit of their all being under Capt. R.'s personal superintendence, and within an easy distance, and with a good road from the port. The ingredient of carriage to the port was an important one, and all the company's mines would be very favourably situated in this respect.

The price of mining labour is now reduced in the colony to the standard of this country; and, from the number of miners who had recently emigrated, this state of things must continue. Capt. R. had further suggested to the directors, that freight and carriage may be very largely economised by the application of a smelting process of an inexpensive kind; and they have resolved to ask the shareholders for their authority to make an experiment, on a small scale, on some of their own ores. Such experiment to be extended, if it should be found desirable, into more extensive operations. If, as the directors believe, the freight and carriage would be largely economised, the saving would of itself form a handsome profit. It would be satisfactory to the proprietors to be informed, that the peculiar qualifications of Captain R., as an assayer and smelter, were a particular desideratum in the colony; and the facility with which the ores in the colony were fused, encouraged the expectation that much good would result from a reduction of the ores by smelting.

In consequence of information received by the directors, on which they could confidently rely, they had also resolved to recommend a limited investment in acquiring mineral lands, which would be subject to no dues or royalty; and they had organised such a plan for the selection of these lands, as they conceive would be attended with the best results. The measures which they have above indicated, and the conviction which their increasing intelligence of the minerals of the colony had given them, that an extensive and profitable field of operations was open to them, induced the directors to suggest to the proprietors, that the capital of the company should be nominally increased to 60,000*l.*; and that the shares, instead of being 600, should be subdivided to 6000, of 10*l.* each; and that a call be immediately made of 5*l.* on the original shares, being equal to 10s. in the subdivided shares. A proper supplementary Deed of Settlement is in course of preparation, having for its object the required alterations in the constitution of the company. In compliance with the first resolution of the annual general meeting, a satisfactory arrangement has been concluded with Mr. Angas, and which would be carried out by deed, giving the company a title, under certain restrictions, which are necessary to secure Mr. Angas from incumbrance in dealing with his property generally, to a site of any of his other lands, in which the company might discover minerals, and be desirous of working.

Copper ore had been discovered immediately on the margin of a very extensive district of lands belonging to Mr. Angas—north-east, east, south, and west—and the directors looked forward to the discovery of such minerals in the intervening lands as would form sites for further working.

Instructions had been sent to Capt. R. to proceed to work the lands of Mr. Angas, at Lynedoch Valley; and an intimation had been sent, that he would shortly receive authority to work the lands of the South Australian Company there also.

The report having been read, several questions were submitted by the shareholders present, as to the value attached to the newly-acquired property; and a discussion took place as to the propriety of raising capital for the express purpose referred to in the report—that of acquiring other mineral grants, as also the experiment of smelting in the colony. To these, and other questions, touching on the property possessed by the company, and the prospects held out, we will endeavour briefly to recapitulate the explanations afforded by the chairman, and the information elucidated in the course of the discussion from Mr. Hodgkinson, Mr. Francis, and others, who are familiar with the district and the position of the company. We gather that, in addition to the property possessed by the company under the agreement with Mr. Angas, and which extends over 20,000 acres—being bounded on every side by mineral property and discovered lodes—that the directors have secured three additional setts, perfectly independent of the property referred to—one of these, at Greenock Creek, is held at 1-15th dues; another at Lynedoch Valley, now in course of working by the South Australian Company, which has been taken on advantageous terms—the royalty being dependent on the produce or yield of the ores. From this mine, it is contemplated that very early returns will be made.

The property, held under Mr. Angas, is subject to a royalty of 1-14th; and there being a vast extent of surface, such terms were considered favourable, although, as the chairman explained to the meeting, the object of the directors, in raising an additional capital, and requesting the shareholders to place such at their disposal, relying on their discretion as to employing it wholly, or in part, was with the view of acquiring other mineral ground, or sections known to contain lodes, whereby they would be free of any charge for royalty. It was not the intention of the directors to become landed proprietors; but they considered, by the application of a comparative small amount, they would not only secure valuable mineral ground, and which they had, indeed, already in view, but they might subsequently dispose of the surface. The mines held by the company, it appeared, were from 20 to 28 miles from the shipping port; and it was confidently expected, that a shipment would be made on an early day. Some of the ores, on assay by Capt. Rodda, had been found to yield 50 per cent. It having been suggested, in the course of the proceedings, that the directors should limit their expenditure in purchasing tracts, it was determined on, as fully meeting the views of the directors, that a certain sum should only be applied to absolute purchase; while they had the full authority of the meeting, to enter into such arrangements as they might deem expedient for the acquisition of mineral property, having the right to search for minerals, and work the same on certain terms, to be agreed upon, with power to purchase within a given period—the purchase-money being determined on taking to the property, but not binding on the company, should they determine on abandoning the ground so taken.

The report having been adopted, certain resolutions to the effect of raising additional capital by issuing an increased number of shares, and, in a measure, reconstituting the company, were agreed to—the present number being increased from 600 to 6000 shares; on which it was resolved, that a call of 10s. per share should be made, payable in one month, such call being equal to 5*l.* per share on the original shares. A supplementary deed, for carrying out the objects of the meeting, was submitted and approved, and which was confirmed at another special meeting, held subsequently for that purpose.—A vote of thanks having been given to the chairman, the meeting separated—some explanations having been first entered into as regards the smelting experiments, which the CHAIRMAN assured the meeting should be watched carefully, and a cautious disposal of the funds of the company be strictly adhered to.

LLANCYNFELIN MINES.

A meeting of adventurers was held at the offices, Finsbury-square, on Friday, the 13th inst. JAMES FOWLER, Esq., in the chair.

The circular convening the meeting was read; and Mr. STAINSBY, as the manager, briefly adverted to the proceedings of the company, and the course observed by the directors in obtaining the assistance of Capt. Paull, of Tavistock, who had visited the property with Mr. P. N. Johnson, both of whom had made reports on the mine, and which that gentleman proceeded to read:—

REPORT OF CAPTAIN PAULL.

Tavistock, June 19.—I have carefully inspected the various departments of your mines; the first object of my consideration was the different lodes and branches, as developed in the several workings. We first descended the engine-shaft, which has been sunk about 28 fms. since my last visit: this shaft, with its various pump-work, is in good order, and capable for any amount of operations, which may be carried on to 100 or 150 fms. in depth. The strata through which it has passed struck me favourably, as being congenial for holding deposits of ore, especially as it is situate between the several lodes and branches both north and south. From the engine-shaft, at the bottom level (the shaft is said to be near 10 fms. deeper—the bottom of which I could not see for water), we passed through the cross-cut, at the bottom level, which is 17 fms. long, in a southerly direction to the main lode; this level struck into the old, or 18 fm., level, below the adit, which had been driven from the whim-shaft (see my former report); this level is driven east of the shaft about 11 fms.—the present end of which shows some ore of good quality, in disordered ground—nevertheless, I think, likely soon to produce good saving work; the back also, in two places, shows saving work, of good quality. We then traversed this level, which extends many fathoms west of the western whim-shaft, and in course of which I was much struck with the variations in the character of the lode, especially where they have been taking away the ore—the lode now remaining in places spotted with lead, in others little veins interspersed: at one point there is developed a split, or horse, to use a mining term, with orey ground, both at the north and south walls, and which is likely to unite and form a course of lead at a deeper level: there are also other favourable indications, such as "slickensides," in some places, and greens in others. At the extreme end west the lode is barren and poor (if lode there is at all)—it being either further south, or lost in a hard channel of ground, which runs at that end of the mine. I found, by the captains that a winze had been sunk under this level, about 10 fms., and that there was a lode, about 18 in. wide, containing good work in the bottom—it was full of water, &c.

I shall now describe the 8 fm. level, and return again to the 18, or bottom level; and, in passing, I may say I felt most anxious to see those points which at my former visit showed such a course of ore. I found the remaining parts of the lode, both above and below, that are clear of rubbish, giving evidence of the good ore that had been taken away, and telling me, in the most significant language, that the course of ore taken away was not the only one to be found in this lode. I then examined the winzes on the course of the lode, also the ends east and west, stopes, &c., and (with the exception of the end west, which is in the poor channel) found orey ground in several places, but not such as would pay to work on tutwork, but on tribute (or making the men interested in saving the ore) it would pay a profit, especially considered in connection with the excellent machinery attached to the steam-engine, for crushing or stamping the ore. Before leaving the main lode, I must say, if the property was my own, and I could possibly obtain the means, I would sink the engine-shaft full 20 fms. deeper, intersect the lode, and drive east and west on its course, under the points before alluded to. I would recommend driving the 18 fm. level east, to be under the ground worked at and near the surface for ore, and which would probably be a good level before long. To this I would add the working of at least six or eight pitches, by a man and boy, or two men, each; and, though the captains told me they could not get the men, I have no doubt but that means could be taken to introduce this mode of working in this mine, and afford profit to the adventurers, as far as the tribute was concerned. I then examined Fearon's shaft, which is sunk about 12 fms.; this is intended to cut the north lodes. A promising object also Jones's adit, which is driving towards a very kindly branch, the expense of which would not be much yet at either of these points. A suspension might take place till the main lode is developed much further, if thought proper. Jones's adit is driven about 70 fms., and leaves about 140 fms. more to be driven, to cut the first lode shown at the surface; these two points might be suspended, if thought proper.

In regard to the surface arrangements, both of the steam-engine, with its attachments for crushing and stamping the ore, and pumping the mine, it is well laid out, and in good order; but, with regard to the stamping and dressing the ore, there are a few details that can be soon put right for a trifling expense; after this, I should recommend the halvan ores to be let on tribute, with the use of the stamps, and which will do for the taker at 10s. or 12s. in the 1*l.*; by this means the returns would be increased, and the mine further developed at no very great expense, and I hope eventually become a profitable concern. Before I conclude, allow me to say, I shall feel pleasure in giving any further explanation to the directors in my power.—JOHN PAULL.

REPORT OF P. N. JOHNSON.

London, June 22.—It is so short a time since I reported on the present state of the mine at the special general meeting, that I have little further to add; but having accompanied two of our board to Wales, for the further investigation, with Capt. John Paull—first, as to the cause of the deficiency of returns, under what was represented by the agent, and what appeared to me from such ore as was exposed at the surface of the several piles, as seen on my visit at the beginning of this year; and also with the object of giving an opinion as to the propriety of continuing further operations, and to what extent. I beg to offer the following observations:—In regard to the deficiency of return, I must say, it is totally inexplicable as regards the quantity at surface; and my opinion is held out by that of the ore dresser, who states that, had the piles alluded to been throughout alike, and as they appeared at surface, they would have produced four times the quantity that has been returned. The ore which appeared at the several stopes and backs, and particularly from where I broke some fine samples on my former visit, has been worked away, and proved to hold good but a very little way; and, in my opinion, as far as the lode has been developed, there is no ore to take away which would leave any profit to the adventurers; but, as far as these observations go, I refer only to the lode that has been worked by the present company, shown as the main lode. There are, however, other points, to which I would call your attention, should you decide on further prosecuting the other lodes in the sett belonging to the company, and which can be tried at a comparatively trifling expense, with the efficient machinery now working on the mine, and which, at the limited extent to which they have been developed, are of very promising character.

First, some south lodes—to try which, an adit has been brought up to an extent of fathoms, and a small shaft sunk—these can be proved by six men, at a cost of about 30*l.* per month. The second are the north and middle lodes; and for working which, there are flat-rods erected, and now in action. A shaft has been sunk, so as to command these and the junction of a sinking lode, and which holds out prospects of success; this could be worked by nine men, at an expense of about 45*l.* per month. I calculate, to prove these lodes, including agency, coals, engine-men, and materials, that the operation alluded to would be a monthly cost of 130*l.*; and as the stamps are now working, you would be able to return to a profit the poor class ore, and halvans now at surface, what might be broke on tribute. After the bad success attending the operations hitherto, I must decline giving an opinion, which might be the cause of disappointment—at the same time, considering the facilities you have by the efficient machinery on the mine, you have the power of making these trials at a less expense than would otherwise be incurred.

P. N. JOHNSON.

A lengthened discussion ensued as to the propriety of continuing the workings, or dissolving the company, from which it appeared, that a deceptive, or, at least, an illusive description was given, as to the quantity of ore at surface—inasmuch, that it had been represented the ore at surface was 140 tons; and that the monthly reports stated the raisings were 30 tons: this, however, had, upon examination, been found to be incorrect; indeed, the piles of ore were so made as were calculated to deceive the most experienced miner—Mr. P. N. Johnson stating that, after 30 years' experience in the prosecution of lead mines, he had been misled—the produce being far below that at which he had estimated it, arising from the deception so practised. It had been determined, with the view of ascertaining the real value of ore at surface, as also the prospects presented by the mine, to depute Messrs. Fowler, P. Stainsby, and P. N. Johnson, to inspect and report on the mine—from which it appeared, that the representations made by the late agent were not borne out; and, accordingly, he was dismissed, and Capt. Edward Rogers, from the Tamar Mines, in whom Mr. Johnson put much confidence, placed in his stead. With reference to the operations at the mine, it was stated, that the monthly cost was about 140*l.*, which, it was resolved, should at once be stopped.

The accounts submitted, and the explanations afforded by the chairman, showed that the entire calls amounted to 14,080*l.*, being 11*l.* per share, on 1280 shares. The liabilities of the company were 3490*l.*, against which were to be placed the arrears of calls, and the amount due on that lately made, amounting in all to 2672*l.*, and thus leaving a deficit of about 800*l.*; against this, however, was to be placed the value of the machinery, which might be considered at from 1500*l.* to 1800*l.*—thus leaving, after the payment of the present call, and the arrears being paid up, a balance in favour of the company, assuming the mines to be abandoned, of 12s. to 15s. per share—there being 1392*l.* arrears, which, however, it was considered would be paid up. The machinery alone upon the mine had cost 3100*l.*

We do not deem it necessary to enter into the discussion, as our remarks convey the matter—while it was resolved, that a special general meeting of the adventurers should be held on the 3d of Sept.; then to determine, or otherwise, on the dissolution of the company, and, in the meantime, that all workings should be suspended.—A resolution to such effect having been carried, and thanks voted to the chairman, the meeting adjourned.

HOBB'S HILL MINING COMPANY.

A general meeting of the shareholders was held at the mine, on Thursday week, the 5th instant.—The accounts were examined and passed, showing—supposing all calls paid up, and liabilities settled—a balance of about 20*l.* in favour of the adventurers.—The captain's report, as well as that of Capt. Opie, of South Caradon, who went underground, and carefully inspected the mine, was highly satisfactory; they stated, that the appearances were most promising. The lode continues regular, producing fair quantity of tin, leaving no doubt at all, on our extending the levels, the quantity will considerably increase. Authority was given to the captain to purchase a wheel for dressing the ore, and that it be determined at the next meeting where to erect the stamps.—The reading of the reports appeared to give satisfaction to the shareholders.—The following resolutions were passed unanimously:—That the purser do sue in the next county court, to be held at Liskeard, on Tuesday, the 7th day of September next, and in any future court, all persons owing more than one call on their respective share or shares. A case having been brought forward against an adventurer in this mine, on Wednesday, it was decided against him, with an order that the calls, with court expenses, should be paid at once; establishing the legality of the court to settle mining matters, there is no doubt will be attended with much benefit to the country at large.—It was also resolved, that the resolution passed at a general meeting on the 6th day of October last, be rescinded, wherein adventurers were given the power to relinquish their shares, being at the time in arrear with calls, and that the 17 shares given up be passed to the credit of the company; and the mine be divided into 289 instead of 256 parts or shares. Also, that a call of 20s. be now made on each 289th share, the same to be paid to the purser immediately.

UNITED HILLS MINING COMPANY.

The adjourned annual general meeting was held at the offices of the company, Adam's-court, Old Broad-street, on Thursday, the 12th inst.

R. CLARKE, Esq., in the chair.

Mr. SMITH (the secretary) read the notice convening the meeting.

The CHAIRMAN reminded the meeting of the resolutions passed at the preceding meeting, on the 10th June, authorising the directors to carry on the workings of the mine for two months, at which time they were to report to the adjourned meeting the result of their exertions, which would be found in the directors' report, which was read by the secretary, as follows:—

The directors, in consequence of the resolution of the annual meeting, lost no time in taking the opinion of Capt. J. Richards, as to the course to be pursued with these mines, and his report will be read to the meeting. The directors, from his report, were induced to hope that the mines might still be prosecuted to advantage; and under that impression a new boiler was purchased, and the directors were prepared to have incurred the further expense there recommended, if that would have entirely sufficed, and the indications of the mines in other respects have warranted it. The directors, however, lament to inform the meeting that the concurring testimony of the captains and agents at the mines satisfied them from what has occurred since, that a much greater outlay would be eventually necessary, and that the adventure can no longer be prosecuted with advantage, regard being had to the limited resources of this company. The reports of the captains and agents of the company will be laid before you, as well as that of Capt. Nicholas Vivian, and Richard Eustace, of Stray Park, who, within the last few days, inspected the mines in behalf of one of the oldest adventurers, with the sanction of the directors. This company being a scrip company, with shares fully paid up, it is not competent to make calls on the shareholders, and capital can only be raised by the further issue of shares, and on the last issue it will be in the remembrance of the meeting, many of the shareholders stood aloof, and declined taking their quota; it is, therefore, hopeless to expect to raise capital by an issue of further shares. A considerable debt already exists upon the mine, which every month greatly adds to—the monthly loss being averaged at 250*l.*; and 18 months would be necessary to sink the sump 10 fms., whilst a new shaft and engine, and additional outlay on those existing, would be also necessary. The proprietors will, under these circumstances, judge for themselves; but the directors cannot conceal from them their opinion, that it is advisable, without delay, to ease the expenses of the mine, and at once to authorise the suspension of the working of the mines, except so far as the same may be necessary for winding up the concern, with a due regard to the interest of the company. It is with the greatest pain the directors have come to this conclusion, but they have no alternative.

The SECRETARY then read reports from Capt. J. Richards, N. Vivian, and Eustace, on the present state and prospects of the mine, by all of which it evidently appeared, that with their present engine-power, they had not the means of working the mine, unless at a loss of from 200*l.* to 300*l.* per month.

The CHAIRMAN then took the opportunity of stating, that it would be observed, by the reports, that by the abandonment of mines in the vicinity of their property, they were overpowered by the water, which their present engine was unequal to overcome; and that they had been beaten by an element which they could not control: it then became a question, whether they should proceed, at a certain loss, incur the expense of an additional engine, or abandon the adventure.

Mr. MICHAEL WILLIAMS observed, that, as a party holding one-fourth of the mine, and having very recently been on the spot, in communication with the agents, and in face of the reports already read—the united opinion being, from the water breaking in, it was useless to continue working, or to recommend any further outlay—he would suggest, that the directors have the power to work the mine for a short time longer; and, after giving a description of the workings of the mine, and the difficulties they had had to contend with, the following resolutions were proposed and unanimously carried:—"That it is the opinion of this adjourned meeting, from the foregoing reports, that it is not expedient to prosecute further the working of this mine.—That the directors be accordingly requested and authorised to abandon the mine at the earliest period they may see proper so to do, and close the accounts of the company, with a view to its dissolution.—That as soon as the materials on the mine are sold, and the accounts made up, that a general meeting of the shareholders be convened, with a view to the dissolution of the company."—The meeting then adjourned.

WHEAL TREMAYNE MINING COMPANY.

A meeting of adventurers was held on Tuesday, the 10th inst., at the offices, George-yard, Lombard-street.

THOMAS FIELD, Esq., in the chair.

A statement of accounts was submitted, showing present balance due to adventurers to be 626*l.* 6s. 10d.—The sales of copper had produced 791*l.* 9s. 6d.; black tin, 1452*l.* 14s. 11d.; arsenic, 35*l.*; silver-lead, 272*l.* 3s. 8d.=2551*l.* 8s. 1d. The accounts having been examined, were passed, and it was resolved, "That the accounts be forwarded from the mine, for a longer time prior to the general meeting, to allow of more thorough examination; and also that a stock account of tin be forwarded, to be submitted to each general meeting." The following report, from Captains J. Phillips and W. Blewett, was read to the meeting:—"Our sumpmen have been engaged this week in altering the lifts in the engine-shaft; next week we shall commence sinking for bearers and cisterns. The lode in the 70 fm. level, east of the flookan, north of Hockin's shaft, on Wallis's lode, is 4 ft. wide, producing good stones of grey and yellow copper ore; the lode in the 70 fm. level, west of the said flookan, is 1 ft. wide, producing a little tin, and stones of copper ore, opening tribute ground. The lode in the 60 fm. level, east of Alexander's shaft, is small, and poor at present; we expect to have a better lode very shortly, as there is a good bunch of ore gone down before us in the level above; the pitches in the back of this level are looking well. The lode in the 53 fm. level, west of Blewett's shaft, on Wallis's lode, is 18 in. wide, opening tribute ground that will work at 9s. in the 20s.; we have about 4 fms. more to drive to get this end under Leed's shaft. The 53 fm. level, west of Pollard's shaft, on the engine lode, is driven west 50 fms.; the lode is 6 in. wide, unproductive at present. In the 40 fm. level cross-cut, driving north of Fox's shaft, the ground is rather hard for driving; we have about 7 fms. more to drive to intersect the engine lode, near the new shaft; when this is done, we shall be able to throw open tin-ground fast; we hope to complete this in the course of next month. The lode in the 30 fm. level, west of the new shaft, on the engine lode, is 9 in. wide, worth 4*l.* per fm. for tin. The winze sinking under the 20 fm. level, is worth 5*l.* per fm. for tin; this winze is 8 fms. west of the 30 fm. level; the pitches, east and west of Allen's shaft, on Allen's branch, are looking pretty well for tin. Our prospects for silver-lead ore are much the same as they have been for some time past. At Wheal Margaret, the water is going down fast, and we hope to resume driving the 10 fm. level in the course of next week. In the 35 fm. level, east of Shugg's shaft, on Wheal Bonnett lode, the lode is 10 in. wide, worth 5*l.* per fm. for tin; the lode in the 35 fm. level, west of the said shaft, is 9 in. wide, worth 3*l.* per fm. for tin—this lode is much improved from the level above; we hope we shall increase our copper ore sampling next two months."

TAVY CONSOLS MINING COMPANY.

A two-monthly meeting of adventurers was held on the 3d inst., at the Central Hall, Plymouth. Capt. MACQUEEN in the chair.

A question having arisen as to the forfeiture of Mr. J. R. Sleeman's two shares at the last meeting (he being in Ireland), the matter was referred to the next meeting. The following shares—J. Edgecumbe, 10, and Mr. Stannis, 9—being two calls in arrear, were forfeited to the company. A special general meeting is convened for the 31st August, to forfeit all shares on which calls are overdue. The accounts were then exhibited, showing balance in favour of mine, 301*l.*; the amount received for copper ore had been 258*l.* 17s. 4d.; and another parcel of 55 tons, just ready, was expected to produce 300*l.* The thanks of the meeting were given to the managing committee, Admiral Tremlett, Captains Bulkeley and Paull, and Messrs. Foy and Rendle, who were re-elected. The purser was authorised to give due notice for the discontinuance of their sales of ore by private contract. The following report from Captain A. W. Martyn, was read to the meeting:—"The engine-shaft is 3 fms. 3 ft. below the 24 fm. level; the lode still continues large, from 5 to 6 ft. wide, composed of mundic, spar, and strong spots of yellow ore, but not yet in quantity enough to save—sinking at 18*l.* per fm. The 24 fm. level is driven from the shaft 5 fms. 3 ft., where the lode is upwards of 8 ft. wide, composed generally of mundic and good stones of yellow ore; and although this end has not proved so productive as we had anticipated from the ore that is gone down in the bottom of the 12 fm. level, yet I can still say that the end presents a very favourable appearance; and have not a doubt, if not here, at deeper levels, it will turn out, perhaps, beyond our sanguine expectations—driving at 5*l.* per fm. We are still dessing the lode in the 12 fm. level, west of cross-course, and shall continue it about 2 fms. further, before we cut through the lode, as we had not much ore in the shallow adit, before we got that distance from the cross-course; we have already cut into the lode, but not through it, where it is showing spots of ore, but for the present poor; there is a quantity of water gushing through it, which has nearly drained all the water from the shallow adit—driving at 5*l.* 10s. per fm. We have driven north on lead lode in the 12 fm. level about 10 fms., which has produced some saving work; and, about 8 fms. from the copper lode, cut another east and west lode, about 2 ft. wide, and have driven on it east about 2 fms.; it is also much corrupted with mundic, but some part of it saving work, and ore of very good quality—driving at 2*l.* 15s. per fm.; we have two pitches working in the back of this level—one by four men, at 6s. 8d. in 1*l.*; the other by two men, at 7s., and the parties dress their ore—they are still looking very well. We have also a pitch in the shallow adit on lead lode, at 14s. in 1*l.* Our grinder-wheel, grinder, &c., are in a progressive state, which I hope to get ready to work in about three weeks. We shall sample about 55 tons of copper ore on Thursday next, and have about 15 tons now on the floors, prepared for the grinder."

COMBLAWN (formerly Wheal Elizabeth).—A meeting of shareholders was held at the offices, King-street, Cheapside, on Tuesday last, the 10th inst.—JOHN ADDIS, Esq., in the chair.—The report of Capt. Samuel Seccombe, which recommended a more effectual trial of the mine by the erection of an engine, to enable the lodes being seen at a greater depth, having been read, it was unanimously agreed that an estimate and further report be furnished by him, so that the next meeting should arrange for its immediate erection. The accounts having been examined and passed, a call of 1*l.* per share was made.

CONDURROW MINING COMPANY.

At a meeting of adventurers, held at the mine, on the 10th inst., the accounts were examined and passed, which showed: labour cost for June and July, 650*l.* 3s. 11d.; merchants' bills, 124*l.* 2s. 6d.; lord's dues, 48*l.* 0s. 11d.; over-credited in March, 10*l.* 17s.—Creditor, by copper ores sold, 786*l.* 8s. 2d.; tin ditto, 104*l.* 11s.; property tax, 4*l.* 14s. 4d.—together, 965*l.* 13s. 6d.; showing balance in favour of the mine of 135*l.* 9s. 2d., which deducted from 459*l.* 7s. 6d., due the purser at the end of June, leaves balance against the adventurers of 323*l.* 18s. 4d. It was resolved, that the next meeting be held on Tuesday, the 12th October next. The following report, from Mr. N. Vivian, the purser and manager, was read to the meeting:—"The prospects of the mine continue to improve. The sump, sinking under the 50, is down 8 fms.—lode very large and inviting, with a rich branch of tin, and rich branches of grey and black ore, worth together, at least, 30*l.* per fm.; in two months more, the shaft will be sunk to a 60. In the 50, east of Pryce's engine-shaft, on the main lode, the lode is 5 ft. wide, yielding a small quantity of tin and rich grey ore—worth 7*l.* per fm.; this level, although never worth much until now, is at present working to profit; in the back of the same level, east of Pryce's, stoping at 15s. per fm.—worth 5*l.* to 7*l.* per fm. for ore and tin. In the 30, west of Pryce's, on the Llandower lode, driving at 7*l.* 10s. per fm.—worth 25*l.* per fm.; in the same level, east of Pryce's, on the Llandower lode, driving at 7*l.* 10s. per fm.—lode 3 ft. wide, with good stones of ore and tin; in the back of the same level, west of Pryce's, stoping at 4*l.* per fm.—worth 25*l.* per fm. In the 10, east of Pryce's, on the Llandower lode, driving on tribute at 5s. in 1*l.*—lode worth 30*l.* per fm.; the bottom of this level is stoping on tribute at 5s. in 1*l.*—lode of same value, in the winze, sinking under the same level, west of Pryce's, on Llandower lode, the lode is large, with stones of ore and tin; in the same level, driving east of Pryce's, on the main lode, at 20s. per fm.—lode 3 ft. wide, and presenting indications of a very favourable kind. Hope's shaft sinking under deep adit, at 20s. per fm.—large promising lode. The deep adit end, driving west on Llandower lode, at 10s. in 1*l.*—worth 20*l.* per fm. There are sundry pitches in different parts of the mine on which there is nothing particular to remark, but which appear, on the whole, to be working to some advantage, and leaving the tributers fair wages."

WEST WHEAL MARIA MINING COMPANY.

A special general meeting of adventurers was held at the mine on the 31st July. HENRY SYMONS, Esq., in the chair.

The report of the committee on the audit of the accounts, showing a balance of 2302*l.* 10s. 6d. due from adventurers, having been received and adopted, a call of 10*l.* per original, or 1*l.* per 2560th, share was made, payable before the 20th inst. It was resolved—That the regulations of the company be altered, to the effect, that at all future meetings, any shareholder—either present, or represented by proxy—shall be competent to take part in making a call, and in transacting any other business relating to the mine; also, that Mr. Bayly be requested to apply to Capt. J. Richards for the arrears of rent due from him, and also to give up possession of Capel Tor Cottage, now in his occupation, to Capt. Rodda—it being desirable that he should reside on the mine. —The following report, on the appearance and prospects of the mine, and the mode proposed for its future working, was read to the shareholders:—"The eastern engine-shaft has been sunk 6 fms. 5 ft. 11 in., making the present depth of this shaft 38 fms. 4 ft. in ground, which has been hard and very troublesome for sinking—but for the last 6 or 8 ft., the ground has been a little more favourable; the lode in this shaft is about 3½ ft. wide, producing good stones of ore, saving work, mixed throughout the lode. In the western engine-shaft, we have sunk under the 54 fm. level about 9 fms., cut bearer holes, put in bearer and cistern, altered the 11-in. drawing-lift. 10 fm. to a 20 fm. lift, put in 8½ fms. of main rods and stays, cut plat in the 54 fm. level, put in pent-house, hung tackle, &c.; the lode in this shaft is nearly perpendicular, about 3 ft. wide, and composed principally of capel, spar, mundic, and a little ore. In the 54 fm. level, east of the western engine-shaft, we have driven about 22 fms.; the lode in this level is about 2 ft. wide, composed chiefly of capel, spar, and a little mundic, and good spots of ore occasionally, and is looking better than it has yet done; in the cross-cut south, in this level, we have driven about 15½ fms., in ground hard for driving. We have cut through three branches dipping north—two of them containing ore and mundic, and one containing flookan and spar. There is pretty much water coming out of the end, and a branch, or lode, is probably not far from it. This cross-cut should be continued until the Wheal Williams lode, which underlays north, is cut: and which is expected to form a junction with the Maria lode in this shaft, at the depth of 70 or 80 fms. I have also commenced a level in the bottom of the eastern engine-shaft, and driven west about 5 ft. The lode appears to open going west, producing good stones of ore, and the ground is improved both for sinking and driving in this shaft. I should recommend the above two levels and the cross-cut to be continued driving, and both engine-shafts to be continued sinking. I would also drive the 54 fm. level west, as soon as returns from the eastern part of the mine provide for the outlay."

WHEAL BARBARA MINING COMPANY.

A meeting of adventurers (the ordinary two-monthly meeting) was held at the British Mining Company's Offices, 41, Moorgate-street, on Thursday, the 12th of August. W. FENTON, Esq., in the chair.

The circular convening the meeting was read.—The correspondence, including the last report, received from Capt. H. F. Stephens, was read and approved, the same being deemed satisfactory.—The accounts for the past two months, as under, were then submitted and passed:—

Cash in hand		£179	12	5½	Costs for May	£ 90	18 2
40 shares sold, at 3*l.*		120	0	0	Ditto for June	122	12 3
120 ditto, but unpaid		360	0	0	540 shares, valued at 3*l.*	1620	0 0
540 ditto, on hand		1620	0	0	Balance carried down	476	2 0½
210	Total	£2309	12	5½	Total	£2309	12 5½

ASSETS.—Balance brought down, 476*l.* 2s. 0½d.; 540 shares, 1620*l.* = 2096*l.* 2s. 0½d.

The accounts having been read and approved, the correspondence received since the preceding meeting was read, also a report from Capt. H. F. Stephens, which will be found among our "Mining Correspondence."—A conversation ensued, as to the merits of the undertaking, and the nature of the proposed operations, which were considered highly satisfactory on the part of the meeting; and the committee were re-elected for the next two months, it being understood that the measures proposed for the extension of the workings, and further developing the resources of the mine, would be attended to with a due regard to economy—at the same time, that the workings should progress with the utmost despatch.—The meeting then adjourned.

BUDNICK CONSOLS.—At a meeting of adventurers, held at the account-house, on the 2d inst., the accounts were passed, as follows:—To balance from last account, 451*l.* 18s. 6d.; costs, &c., May and June, 1349*l.* 3s. 7d.=1801*l.* 2s. 1d. Ores sold, less dues, 1294*l.* 17s. 11d.; carriage of tin, 21*l.* 3s. 6d.=1316*l.* 1s. 5d. —balance against the adventurers, 485*l.* 0s. 8d.

WHEAL BUCKETTS.—A meeting of adventurers was held at the mine, on the 3d inst., at which the following accounts were passed, and the balance ordered to be divided and collected forthwith:—To balance, short paid on last division of cost, 8s. 11d.; cost and merchants' bills for March, April, May, and June, 3088*l.* 18s. 9d.=3089*l.* 7s. 8d.—By ores sold, less dues, 2447*l.* 9s. 4d.: leaving balance of 641*l.* 18s. 4d.

WHEAL SETON.—The usual two-monthly meeting of adventurers took place on Tuesday last, at which the following accounts were passed, and a dividend of 20*l.* per share declared:—By balance at last account, 1885*l.* 12s. 6d.; ores sold, less dues, 5946*l.* 14s. 6d.=7832*l.* 7s.—To cost and merchants' bills for May and June, 5875*l.* 5s. 5d.; dividend of 20*l.* per share, 1980*l.*=5855*l.* 5s. 5d.: leaving balance now in hand of 1977*l.* 1s. 7d.

LONDON AND NORTH-WESTERN RAILWAY TAXES.—The direct taxes (not including the income tax on dividends) paid by this company, exceed 100,000*l.* per annum.

HUMAN FOSSILS.—Until very recently it has been a universally admitted item in the geological creed, that no genuine fossil remains of man had ever been discovered, and almost as universal was the confident belief that none such would ever be found; in other words, it was held established by the strongest negative proof, that man had not been created until after the period during which the surface of the globe underwent those stupendous revolutions, the history of which is read by modern science in the constitution and position of the earth's strata, and in the petrified remains of plants and animals, the medals and coins, as it were, of telluric archæology, imbedded in those strata. This doctrine has been much shaken by the alleged discovery, in the vicinity of Natchez, in the United States, of some human fossils associated under circumstances exactly identical with the remains of extinct mammalia. The Rev Mr. Allen, of Cirencester, having written a letter of inquiry on the subject to Dr. Dickeuson, of Natchez, who is in possession of those fossils, has just received and to be merely scratched over?" * * * Surely, if he were sincere, and of *good faith*, he could, at the same time, have afforded to give us the true answer to his own question, whether the Coombe Tin Mine had been so worked *to the 90 fm. level* and *raked out*—or whether they have been explored beyond 3 fms. by the ancients; or even below the 19 or 20 fm. by the present workings, at which depths *they are stated to have cut so rich*? These are the points to which his scrutiny should have been directed, if he wished his caution to be acknowledged by a discerning public.

In conclusion, allow me to state, Mr. Editor, that I am at all times happy to acknowledge the value of good advice, particularly when the intention is honest, as in the more agreeable instance of your valued correspondent "Mentor," in your *Mining Journal* of the same date, on the subject of Algerine mining fallacies; but when an obscure writer descends to sinister *inuendoes* and baseless *insinuations*, I cannot but consider him otherwise than as *a disappointed suitor*, seeking unjust ends through unjust means; and one of those (*to borrow his own expression*) among whom it is common now, "*as cousin Jackey*," to put aside the *pick and gad, hard hat and all*, and to come up to town to be supplied in exchange with the gold watch and chain, as well as *fine broad cloth and the "delightful light cigar."* If *one* of the *disappointed*, I hope he will be more successful on the next occasion, and thus take my leave of my "*cousin Jackey*," thanking him for the jocose cognomen, which I apply to him in the absence of a more fitting appellation.

London, August 11. FAIR PLAY.

[*For continuation of "Original Correspondence," see* 10*th page.*]

Original Correspondence.

WATER-POWER *v.* STEAM-POWER.

NOTE TO THE "RAMBLER THROUGH SOUTH WALES."—NO. I.

Pray, Mr. Rambler, inquire a little further, and reason a little more deeply; and you may, perhaps, discover that water-power at the Frongoch Mine, or any other among the Cardiganshire Hills (distant as they are from a supply of fuel), is the only one which a prudent management will adopt. Your informant, who said "that the bottom of the mine would not be drained *before after* the season of frost had passed," either knew little of the matter, or said that which he knew was untrue. If you will repeat your ramble to Frongoch, after the next heavy shower, or one day's steady rain, you will probably see the water-wheels revolving merrily; and you may learn that there is still some quantity of ore at present derived from upper levels—not the bottoms of the mine: and, on further inquiry, you may learn that the steam-engine, of which you speak, was never required for more than a few weeks in any year since it was erected; and that the cost of keeping it in repair, setting it going, and working it, were fully equal to, or exceeded, the return which it secured, and that in some years it was never required at all. Your rambler might be shown admirable reservoirs for storing surplus water-power, such as thunder showers occasionally afford; and that arrangements are making for the application of a hydraulic engine to this Frongoch Mine, which, before next summer arrives, will render its drainage easy, cheap, and constant. Steam-power is, I imagine, duly appreciated by the engineer of the Frongoch Mine, as he has probably employed it as largely as most miners, both at home and abroad; but he has lived long enough to learn, that "correct calculations" prove the greater value of water-power, under such circumstances as attend that particular locality. OBSERVER.

UNITED MEXICAN MINING ASSOCIATION.

SIR,—I have read, with much regret, your comment on the last half-yearly meeting of proprietors of the United Mexican Mining Association, in which you express your satisfaction at the directors not having declared a dividend, which you state would be only "throwing a sop to Cerberus." I can hardly understand how your classical allusion is applicable; but, I suppose, by the "sop" you mean a dividend, and by Cerberus you intend the proprietors—a designation not at all flattering, especially when it is considered that during 23 years' patient suffering, they have only divided two paltry sums, one of 7s. 6d., and the other of 5s. per share.

It appears to me, that it would have been far more commendable, had the board given the shareholders the benefit of a portion of the quite unnecessary large sum kept at their own disposal. The balance of cash in hand, 1st Jan., 1847, was 9325*l.*; and they shortly afterwards received two remittances, of upwards of 10,000*l.*—making a total of 20,000*l.*; every farthing of which is retained during the six months, although the poor shareholders may have been starving.

It appears, that only a few days before the meeting was held, they shipped 150 bottles of quicksilver, which, with nearly 400*l.* for a piece of plate, and sundry expenses, reduced the balance to about 15,000*l.*; this was apportioned as follows:—Say 5000*l.* for unclaimed dividends (which they well know never will be claimed); 5000*l.* for reserve fund; and 5000*l.* surplus. Now, I am satisfied, that they would have been perfectly safe in making a dividend of 5s. per share; which, although when struck, would have amounted to 10,000*l.*, only 9000*l.* of it would have been demanded, thus leaving 6000*l.* as a working capital. I cannot help thinking, that the directors of this company are very censurable for their mode of dealing with the property, without consulting with the proprietors. This lamentable undertaking, which has been 23 years in existence, and, as before said, only paid during the whole time two miserable dividends of 7s. 6d. and 5s., no sooner gives signs of life, than increased expenses are incurred. Instead of offices which might be had for 40*l.* or 50*l.* per annum, a house is taken—rent and taxes 200*l.* per annum, and 300*l.* expense in fittings for it. A new office has also been created, with a salary of 500*l.* per annum; and, in the last half-year's account, I find a charge of upwards of 300*l.* for a piece of plate. These really are strange doings for a company situated like the United Mexican Mining Association, and more strange for them to be advocated by you, the declared "champion of shareholders' rights." Really I do hope, that you will seek to uphold the title you are known by, and not in future designate a proper dividend a "sop," nor a body of enduring shareholders a "Cerberus."—A SUBSCRIBER TO YOUR PAPER, AND A SHAREHOLDER IN THE UNITED MEXICAN MINING ASSOCIATION: *London, Aug.* 4.

DRAKE WALLS MINING COMPANY.

SIR,—Under the head Notice to Correspondents, "Coombe Tin Mine," in your last paper, it is stated, that at Drake Walls Mine, in the parish of Calstock, the old men's workings are found to be 90 fms. deep; however necessary it may be to caution parties from hurriedly embarking in new speculations, the truth should be stated—Drake Walls is not now 90 fms. deep, although working since the old men's days, and will for generations yet unborn, which is more than can be said of many rich mines now at work. I know nothing of Coombe Tin Mine; but parties about to embark in mines, as in all other speculations, should look to see if the *management* be in the hands of *practical men*, and *men who have a character to lose*; it is from such men only you can expect a just prospectus. The London capitalist and others should employ a practical and respectable mine agent to examine and report to them before embarking their capital in mines; a few pounds spent in this way would be well laid out. I should say, the old men worked Drake Walls to about 23 fms. deep.—D.: *Aug.* 10.

COOMBE TIN MINES.

SIR,—Among "Notices to Correspondents," in the *Mining Journal* of the 7th August, I observe as follows:—"PERRAN ST. GEORGE.—The communication of 'A Miner' (Perranzabuloe), can only be inserted *with the writer's name attached*," &c.: "COOMBE TIN MINES.—A correspondent wishes us to caution parties from hurriedly embarking in this undertaking; he asserts, that the intended lease, when granted, *will be valueless*, as it will come from an unauthorised source, *and that the lodes have been already raked by the old tinners*," &c.; and having occasion to make certain comments *on the latter notice*, I deem it essential to prefix the above extracts to the present letter.

In respect to the "Perran St. George" quotation, reference is only taken with the view of inquiring, how it happens that you did not deem it equally essential that the writer's name should be attached to the Coombe Tin Mine caution? I have not deemed it necessary to recapitulate the whole of that notice; but I feel assured, that a perusal of that article will convince you, and every impartial and disinterested reader, that neither a strict regard to truth, or an honest caution to the public, was ever contemplated by the writer of that letter. Therefore, why was not the affixing of the writer's name made the condition of publicity in the present instance also? You must allow me to infer, that the writer has either endeavoured to impose on you, or that you have *heedlessly* honoured him with too much confidence.

As regards the "merits of the caution," I will now, with your permission, treat; but, previously, allow me to assure you, that although an occasional correspondent in your Journal, whenever private rights or justice to individuals is sought to be invaded, yet am I in this, as in some previous communications, a perfectly disinterested party. I have no share, or interest, *as yet*, in the Coombe Tin Mines; although I am free to confess, that I did contemplate some considerable purchase therein, having accidentally received the most favourable description of the prospects of that tin mine from parties totally unacquainted with its proprietors, and of which, upon further inquiry, I have had the most satisfactory confirmation. In this instance, therefore, the "animus" of your anonymous correspondent will fall of its object, and the shaft of envy will recoil upon himself. No doubt, the publicity which this caution to the public now attaches to the Coombe Tin Mines, will conduce to further examination; and it is presumed, that inspection will confirm the favourable opinion of the public as to the merits of this *rising adventure*. However, to prove to your correspondents that his caution meets attention, I have to assure him, that it is my firm intention of shortly paying those mines a visit of inspection; and, if it prove of any interest to you, Mr. Editor, or your mining readers, it will afford me pleasure to convey to you either a public or private report thereof on my return.

But only these are preliminary and general observations; I must request your informant now to tell me, how it is that the *lease*, if even obtained (as I am assured it is) from perfectly authorised parties, *is to be valueless*; or why the tin lodes are not to be found in depth, because they have been raked on the backs by the old tinners. Does he mean to say, that the old tinners have raked all the tin away from the bowels of the earth, in defiance of water, and other mining obstructions? Hitherto the surface works of the ancient miners have been considered as the surest indications of the presence of minerals, and as such still continue to be regarded. His anecdote, therefore, of "Drake Walls Mine, in the parish of Calstock, where the old men's workings are *found to be 90 fms. deep*," although acceptable for sake of information, is certainly not to the point or purpose—for he does not prove that these 90 fms. of depth were actually worked by the ancients, and not by mine adventurers of more recent ages; nor does he instruct us by what means they *raked* so deep; but the conclusion to which he jumps is really very amusing, when he so *simply* asks—"Then, why not at the Coombe and Dartmoor Mines,

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 7 per Cent., 195		Belgian Bonds, 4½ per Cent., —	
3 per Cent. Reduced Ann., 87¾ ⅞		Dutch, 2½ per Cent., 55¾ ⅝	
3 per Cent. Consols Ann., 87⅛ 7		Brazilian, 5 per Cents., New, 84	
3 per Cent. Annuities, —		Chilian, 6 per Cents., 91½	
3½ per Cent. Ann., 89½ 9		Mexican, 5 per Cents., 18 ½	
Long Annuities, 9½		Spanish, 5 per Cents., 21	
India Stock, 10½ per Cent., 240½ 39		Ditto 3 per Cents., 30⅝	
3 per Cent. Consols for Acct., 87⅛ ⅞		Portuguese, 5 per Cents., 30 ½	
Exchequer Bills, 1000*l.* 3d., 1 dis. 2 pm.		Russian, 5 per Cents., 111½ ⅝	

MINES.—The amount of business transacted in the mining share market, during the week, may be calculated with very few figures; at the same time, there has been several inquiries for shares, which it has been found necessary to transact by correspondence—this being a matter of time, as well as price, will carry us into another week before completed. There are some negotiations to rather a large amount on the *tapis*, some of which will, no doubt, be completed before our next Number.

The two-monthly meeting of Seton adventurers was held on Tuesday last, when a dividend of 20*l.* per share was declared—the mine is stated to be looking splendidly, but we have not yet received the official report.

Condurrow account-meeting was also held on Tuesday, the 10th, by which we find that they have been working to profit during June and July; and the next account, it is expected, will present a profit of 300*l.* for the two months, having a course of ore in their shaft worth 30*l.* per fm.

During the week offers have been made for shares in several of the large and dividend-paying mines, such as East Wheal Rose, Carn Brea, Wheal Seton, and others, but we do not find business completed.

The Callington mine shares have been, and still are, in demand—some transactions have taken place at our last week's quotations, and since a considerable advance is being demanded; this has arisen in consequence of an important discovery in that part of the sett known as Kelly Bray—the lode, in which is stated to be a course of ore, has been discovered, composed of grey, black, and yellow copper ore, with a considerable portion of malleable copper.

Several shares in Trebane have changed hands, and a desire to possess them is manifest, probably from the satisfactory arrangement which has been arrived at by the committee appointed at the last meeting of Trelawney adventurers, whereby every facility will be afforded to Trehane, by the use of water from Trelawney. Herodsfoot and Herodscombe may find buyers. North Pools, Condurrows, and East Pools, are sought for in the county—buyers are also to be found here. Shares in the following mines have changed hands—viz.: Callington, Trehane, Herodsfoot, Trelawney, East Crowndale, Holmbush, Gwinear, &c.

The meeting of the United Hills Mining Company, held on Wednesday, resolved on suspending operations, the present engines being inadequate to the draining of the mine, and appearances not sufficient to recommend further outlay.

It is with feelings of the highest gratification, that we are advised of the complete establishment of a company, which, in all probability, will enable the adventurers of mines to get a better price for their ores. We allude to the company which has taken the Spitty Works, on the River Burry, South Wales, for the purpose of smelting ores, on Napier's patent. We are informed that they have already effected a contract for 1500 tons of coals per week, on most advantageous terms.

The business done in foreign mine shares has been very limited.

Despatches have been received by the Imperial Brazilian, St. John del Rey, Anglo-Mexican, and the National Brazilian Mining Association. The whole received is of very little import; the advices to the Imperial Brazilian amount to the mere information of the new mine of Bananal, to which all eyes connected therewith are now directed, which has not yet been drained sufficiently to enable them to see the lode in the bottom.

From the Cocaes and Cuiaba Mines, belonging to the National Brazilian Mining Association, the accounts are more satisfactory than they have been for some time—an increase of returns, and the prospects considerably improved.

The Anglo-Mexican report is very unfavourable; and the St. John del Rey furnishes nothing of any importance or new.

The accounts from Allen, received last week, were more gratifying than any received for the past six months.

RAILWAYS.—At the beginning of the week, shares were still without buyers; but the decline in price was less marked than in the previous week. On Wednesday, some received a slight advance, and others declined; though, upon the whole, the tone of the market was not worse.—Thursday and Friday (although they opened with an apparent tendency to firmness) closed in the same state of depression as at the commencement.

At Messrs. Lamond's sale, on Wednesday last, the market was decidedly firm; and it is hoped, in the depressed and tightened state of the money market, directors of railway companies will not press too severely for calls.

GAS-LIGHT AND COKE COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*	
5,000	British (London)	£18	£1*	£19	
5,000	Ditto (country)	19	1*	20	
1,000	City of London	100	10	210	
1,000	Ditto New	100	10	210	
4,000	Equitable	50	3*	38	
10,000	European	30	1½	18	19
12,000	Gas-Light and Coke Chartered Co.	50	6	58½	59½
6,000	Ditto New	10	6	12½	13½
2,000	General United Gas-Light Company	50	2	17½	18½
10,000	Imperial	50	6	80	82
46,400*l.*	Ditto Debentures	100	4	100	
8,000	Imperial Continental	39½	4½*	61	63
7,000	Ditto New	38	4½*	61	
54,500*l.*	Ditto Debentures	100	5	100	102
2,000	Independent	40	6	54	
3,000	London	50	5	50	51
3,000	Ditto	50	5	45	47
9,000	Phœnix, or South London	42	5	34½	
1,000	Ratcliff	80	5	75	
4,000	South Metropolitan	25	6	31½	32½

MISCELLANEOUS COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*	
10,000	Assam Tea Company	£20	—	£ 2	
1,080	Auction Mart	—	£ ½	26	28
10,000	Australian Agricultural	30	1	20	22
10,000	Australian Trust	25	—	20	
8,000	British Alkali	25	4	163	168
10,000	British American Land	35½	—	14	
8,600	British Rock and Patent Salt	35	18	11	
8,915	Canada	33½	6	36½	38
—	City Bonds (Navigation)	—	3½	60	
1,800	Corn Exchange	37½	11	165	
5,000	Droitwich Patent Salt	25	1*	11	
2,700	Equitable Reversionary	95	4½	97	
—	General Reversionary Interest	100	8	104	106
20,000	General Steam Navigation	14	1½*	24	25
—	Hudson's Bay Stock	—	10	230	240
2,100	Hungerford Market	100	5	—	
1,500	London Commercial Sale Rooms	—	1½	31	32
8,000	London Reversionary	23	—	23	24
300	Margate Pier	—	10	196	
10,000	Mexican and South American	7	—	3½	4
20,000	New Brunswick	75	—	—	
11,600	Peninsular and Oriental Steam	50	7	62	64
6,600	Ditto	40	—	59	60
5,287	Reversionary Interest Society	100	4½*	97	98
—	Royal Mail Steam	—	5½	54½	55½
8,000	South Australian	25	6	—	
20,000	Upper Canada	100	5	93	94
20,000	Ditto	—	5	93	94
10,000	Van Diemen's Land	30	—	3	4

* Those marked with an asterisk (*) are dividend per share.

ERECTION OF A PATENT FUEL ESTABLISHMENT AT SWANSEA.—The firm of Messrs. Warlick and Co., patent fuel manufacturers and Government contractors, Deptford, have it in contemplation to erect forthwith an extensive patent fuel manufactory at Tir Llandore, on the eastern side of the Swansea river. From the establishment of these works, the benefits accruing to the trade of the port are expected to be very considerable—the exports being estimated, we are informed, at no less than about 2000 tons per week.—*Cambrian.*

Alfred Consols.—As S. Arthur and A. Stevens were preparing a blast, it suddenly exploded, injuring Stevens slightly, but Arthur was frightfully maimed, though his life is not despaired of.

Cwmcannad.—An explosion took place at Mr. Crawshay's pits, by which R. Thomas, J. Edwards, and D. Richards, were severely hurt, but not dangerously.

Penydarran.—M. Morgan was killed here by a fall of rubbish.

Plymouth Works, Merthyr.—J. Williams was severely injured here by a fall of rubbish, but is expected soon to recover.

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7	12
512	Albert Consols	1	2¾
1024	Alfred Consols	4¾	30
256	Alternum Consols	2	13
228	Andrew and Nangiles	29½	16
10000	Ayrshire Iron Company	5	3¾
1624	Balleswidden	9	18
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	2	—
1000	Barristown	4½	10
4000	Bedford	2½	3½
128	Besore Lead Mine	14	10
315	Birch Tor Tin Mine	24½	7½
8000	Blaenavon	50	23
100	Botallack	175	140
120	Brewer	5	7
10000	British Iron, New, regis.	10	18½
—	Ditto ditto, scrip	10	19
128	Budnick Consols	52½	40
128	Burthy	20	21
100	Bwlch Cwmerfin	20	—
128	Callestock	17	30
1000	Callington	19	34
256	Caradon Copper Mine	9¾	1
256	Caradon Mines	22½	17
256	Caradon United	24	10
256	Caradon Wh. Hooper	20	4
1000	Carn Brea	15	108
2048	Carmarthen Consols	2	3
2048	Cascade	1	1
112	Charlestown	200	100
166	Cleveland	9	5
512	Coatlithe Hill	¾	1-1½
1900	Combmartin	7½	3
800	Comblawn	1½	1½
128	Comfort	45	100
256	Condurrow	20	27½
2560	Cook's Kitchen	14	5¾
1000	Coombe Valley Quarry	1½	1¾
1000	Copper Bottom	1	5
1024	Cosheen	4½	20
240	Craddock Moor	15½	15
128	Creeg Braws	120	100
500	Cubert Mine	12½	23
2048	Dartmoor Consols	2	4
7160	Derwent	8¾	5
1024	Devon&CourtenayCon.	6	3¼
1024	Devon Great Consols	1	250
1000	Dhurode	2	5
186	Dolcoath	30	50
2560	Drake Walls	4	4
10000	Durham County Coal	45	9
256	East Alvenney	6	10
112	East Caradon	42	42
2048	East Crowndale	4½	1½
512	East Combe Silver-Lead	6¾	6¾
128	East Pool	5	50
100	East Relistian	22	40
9000	East Tamar Consols	1¾	2
—	East Wheal Albert	1	3
94	East Wheal Crofty	280	125
256	East Wheal Fortune	2	3
128	East Wheal Rose	50	1300
2048	East Wh. Rough Tor	½	2
—	East of Scotland Iron Co.	2½	1¾
128	East Wheal Seton	14	20
256	Elborough	1½	2½
256	Exmoor Wh. Eliza	3½	11
512	Fowey Consols	40	45
6400	Gadair	2	2
20000	Galvanised Iron Co.	10	9½
10000	Gen. Mining Co. for Irel.	2	1¼
2048	Georgia Tin Mines	1¾	1¾
256	Gonamena	31½	70
128	Goonvrea	4	1¾
244	Grambler & St. Aubyn	—	12
100	Great Consols	1000	400
256	Great Callestick Moors	22	25
2560	Great Michell Consols	1½	3
256	Great Resugga Moor	3	3½
512	Gt. Wh. Rough Tor Con.	6½	36
1500	Great South Tolgus	2	2
100	Grogwinion	5	—
1800	Gunnis Lake	1½	3
256	Gwinear Consols	5	21
1000	Hanson	14	2
1000	Harrowbarrow Old Mine	8½	2
800	Hawkmoor	3	2
6000	Heigaston Down Con.	½	2½
256	Herodscombe	2½	12
256	Herodsfoot	14	20
10000	Hibernian	12½	1¾
239	Hobb's Hill	6	3
1000	Holmbush	19	7
627	Kirkcudbrightshire	5½	9
2048	Lamherooe Wh. Maria	10	3
2048	Lanivet Consols	4	2¼
200	Larkholes	1	3
128	Lelant Consols	90	60
128	Levant	—	90
1000	Lewis	15	6¼
1280	Llancynfelin	6	—
1000	Llwyn Malees	5	—
3600	Llynvi Iron	50	60-65
256	Lostwithiel Consols	7	7
128	Ludcott	3	3
6000	Marke Valley	10	3
5000	Mendip Hills	2½	1¼
5000	Merionethshire Slate & Slate Slab Co.	1½	2¾-2½
20000	Mining Co. of Ireland	7	6½
256	New East Crowndale	3½	3½
128	North Fowey Consols	25	20
100	North Pool	45	340
70	North Roskear	10½	400
512	North Treburget	2	3
100	North United	72	15
256	North Wh. Abraham	¾	12
262	North Wh. Leisure	1½	3½
128	North Wh. Providence	2½	8
15000	Northern Coal Co.	23	2
1200	Old Delabole Slate Co.	25	50
128	Par Consols	900	1000
256	Penhallow Moor	15	4
4000	Pennant	1½	2¾
100	Penrhiw	30	65
128	Pen-y-Cefn Mine	50	55
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	15
512	Plymouth Wh. Yeoland	4½	20
256	Polsaith Consols	2	4
2048	Prince Edward	1½	1¼
112	Providence Mines	35	45
256	Redruth Consols	3	2
10000	Rhymney Iron	50	30
10000	Ditto New	7	6¼
256	Rose Consols	10	2
1000	Rosewall Hill	1	5
256	Rosewarva Mines	—	12
—	Shotts Iron Company	50	65
2500	Silver Valley	5	2

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
128	South Caradon	10	450
2000	South Dolcoath	2	1
256	Sth. Friendsh. Wh. Ann	16	14
200	South Harvannah	10	25
9000	South Tamar	¾	¾
256	South Tolgus	2¾	18
800	South Towan	10	1¾
256	South Trelawney	15½	10
128	South Yeoland	16½	20
128	South Wheal Basset	110	65-70
124	South Wh. Francis	160	210
256	South Wh. Hope	—	5
1000	South Wh. Maria	2½	2½
256	South Wheal Rose	11½	1
10000	Southern&Western, Irish	2	4-5
280	Spearne Moor	30	40
256	St. Austell Consols	9	14
94	St. Ives Consols	—	320
128	St. Michael Penkivel	5	10½
1000	Stray Park	48	30
9600	Tamar Consols	5	5¼
1024	Tavy Consols	3½	5
6000	Tincroft	7	8
1000	Tin Vale Consols	2	2½
256	Ting Tang	15	10
128	Tokenbury	143½	10
256	Trehane	2	22
8000	Treleigh Consols	6	4½
2000	Trenance	2	—
256	Trenow Consols	30	15
96	Tresavean	10	250
120	Trethellan	5	20
120	Treviskey and Barrier	130	150
268	Trevean	¾	25
256	Trewollack	20	10
128	Trewellard	12	26½
6000	United Hills	5	¾
100	United Mines	300	350
256	Wellington Mines	15	30
128	West Basset	45	28
256	West Caradon	20	168
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Grambler	7	8
256	West Providence	1	20
200	West Seton	40	72
—	West of Scotland Iron Co.	210	212
120	West Trethellan	5	35
256	West United Hills	2¾	4
256	West Wh. Friendship	7½	3
3848	West Wheal Jewel	11	1¾
2560	West Wh. Maria	2½	1
2560	West Wheal Rough Tor	¾	2
256	West Wheal Shepherd	5	2½
256	West Wheal Tolgus	21½	1
256	West Wheal Treasury	19	10
5200	Wicklow Copper	5	12
184	Wheal Adams	41	10
1000	Wheal Agar	—	8
256	Wheal Albert	10	8
128	Wheal Acland	13	2
256	Wheal Allen	2	5
237	Wheal Anderton	16½	26
128	Wheal Ann	—	50½
128	Wheal Arvose	3½	5
1024	Wheal Ash	3	12
120	Wheal Bal	5½	20
2560	Wheal Barbara	1½	3
256	Wheal Benny	6½	5
256	Wheal Blencowe	8	8½
256	Wheal Bucketts	20	22
256	Wheal Byon Consols	½	½
256	Wheal Calstock	3	4
136	Wheal Clifford	190	190
128	Wheal Courtenay	—	20
6000	Wheal Curtis	1½	½
256	Wheal Dyke	12	13
256	Wheal Fortescue	5½	8
512	Wheal Fortune Consols	3½	6½
2048	Wheal Frederick	2	2
388	Wheal Franco	27	40
1024	Wheal Grace	3	2½
128	Wheal Harriet	45	50
256	Wheal Jane	21	15
256	Wheal Kekewich	4	4
256	Wheal Louisa	7½	12
112	Wheal Margaret	79	250
256	Wheal Maria (Hayle)	24	12
4000	Wheal Martha Consols	5	2
512	Wheal Mary Ann	5	24
256	Wheal Mary Consols	38	25
256	Wheal Mary (Lanivet)	6½	4
256	Wheal Maude	1½	1½
128	Wheal Pollard	12½	12
210	Wheal Prospect	4	7
120	Wheal Reeth	27	30
128	Wheal Rose	60	45
2048	Wheal Samson	—	20
99	Wheal Seton	214	850
256	Wheal Sisters	29½	35
256	Wheal Sophia	3½	10
128	Wheal Spearne	10	75
128	Wheal St. Ann	9	15
260	Wheal Trelawney	7½	115
256	Wh. Tremaine (St. Ervan)	1½	20
256	Wheal Tremayne	35	30
128	Wheal Trew	20	21
256	Wheal Trevenna	3	4
92	Wheal Tryphena	140	265
128	Wheal Veniand	12½	10
256	Wheal Vlow (Perranz.)	¾	¾
164	Wheal Vyvyan	—	60
256	Wheal Williams	6	18

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	3¾
15000	Asturian Mining Co.	10	8¼
20000	Australian	2	4
10000	Anglo-Mexican Co.	100	2
12374	Ditto Subscription	25	2¼
3000	Bolanos	150	6¼
2000	Ditto Scrip	15	6¾
12000	Brazilian Imperial	22	7
10000	Cobre Copper Co.	40	18
8500	Colombian Co. regis.	55	} 1
5000	Ditto Scrip	5¼	}
5000	Copiapo Mining Co.	14	3
10000	General Mining Ass'n.	20	15½
5000	Kinzigthal Mining Ass.	2	2¾
20051	Mexican Company	59	—
2000	Mexican & South Amer.	7	3
5000	Mocaubas & Cocaes	25	4½-5
29820	{ Rl. del Monte, regis. / Ditto unregistered }	28½	av. 2
	Ditto Red Debentures	—	90
	Ditto Black ditto	—	14
	Ditto Loan Notes	150	97½
7000	Royal Santiago	10	5
2000	Pachuca Mines	4	4½
11000	St. John del Rey	15	6¼
13174	United Mexican	28¼	2

SOUTH AUSTRALIAN SHARE MARKET.

Shares.	Company.	Paid.	Price.	Shares.	Company.	Paid.	Price
2000	Adelaide	5	7½	18	South Para	15	50
600	Barossa Range	4	24	1000	Poonawurta	—	9½-10
2464	Burra Burra	5	110	400	Princess Royal	34	250
436	Grand Junction	15	28	10000	Royal Mining Company	½	1¼
200	Greenock Creek	5	12	10000	Royal South Australian	—	55½
100000	Scottish Invest. Co.	1	1½	600	Victoria	2	3
500	Wakefield	2	3				

SOUTH AUSTRALIA AND NEW ZEALAND.

Shares.	Company.	Paid.	Price.
100000	North British Australasian (Kaw-aw, &c.)	1	1

**** We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

JOINT-STOCK BANKS.

Shares.	Companies.	Paid.	Div. p. cent.	Price.	
22,500	Australasia	£40	£3	£19½	20½
20,000	British North American	50	5	45	46
20,000	Colonial	25	5	15½	16
—	Commercial of London	20	6	22	23
4,000	Ionian State	25	6	24½	25
60,000	London Joint-Stock	10	6	16½	17½
30,000	London and Westminster	20	6	26½	27
10,000	National Provincial of England	35	5	36½	38
20,000	National of Ireland	22½	8	19	19½
20,000	Provincial of Ireland	25	8	44½	45
4,000	Ditto New	10	8	16	
20,000	Union of Australia	25	6	24	25
10,000	Ditto New	2½	6	2½	2½
60,000	Union of London	10	5	12½	13½

LATEST CURRENT PRICES OF METALS.

LONDON, AUGUST 13, 1847.

	£	s.	£	s.	d.
IRON—Bar *a*, Wales..ton	8	10—	8	15	0
„ ..London ..	0	0—	9	10	0
Nail rods „	0	0—	10	10	0
Hoop (Staf.) „	0	0—	11	15	0
Sheet „	0	0—	13	0	0
Bars „ „	0	0—	11	5	0
Welsh cold-blast foundry pig	4	10—	5	5	0
Scotch pig *b*, Clyde	3	7—	3	8	0
Rails, average	0	0—	9	0	0
Russian, CCND *c*	0	0—	—		
„ PSI	0	0—	—		
„ Gourieff	0	0—	—		
„ Archangel	0	0—	13	10	0
Swedish *d*, on the spot	11	5—	11	10	0
„ Steel, fagt.	0	0—	16	5	0
„ „ kegs *e*	14	15—	15	0	0
COPPER—Tile *f*	0	0—	97	0	0
Tough cake	0	0—	98	0	0
Best selected	0	0—	101	0	0
COPPER—Ordin. sheets, lb.	0	0—	0	0	11
„ bottoms	0	0—	0	0	12
YELLOW METAL SHEATHING	0	0—	0	0	9¾
TIN—Com. blocks *g*..cwt.	0	0—	4	8	0
„ bars	0	0—	4	9	0
Refined	0	0—	4	11	0
Straits *h*	4	4—	4	5	0
Banca	0	0—	4	6	0
TIN-PLATES—Ch., IC *i*, box	1	8—	1	10	0
„ IX	1	14—	1	16	0
Coke, IC	0	0—	1	5	0
„ IX	0	0—	1	11	0
LEAD—Sheet *k* ..ton	0	0—	19	10	0
Pig, refined	0	0—	20	5	0
„ common	0	0—	18	10	0
„ Spanish, in bd.	0	0—	18	0	0
SPELTER—(Cake) *l* on spot	19	17 6	20	0	0
„ „ for arrival	0	0—	20	0	0
ZINC—(Sheet) *m* export.*	0	0—	27	0	0
QUICKSILVER *n* ..lb.	0	0—	0	4	6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto *e* In kegs ½ and ¾-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash in bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash *m* Discount 1½ per cent. *n* Discount 1½ per cent. * For home use it is 32*l.* per ton.

[*From our Correspondent.*]

IRON.—Welch and Staffordshire firm, but Scotch Pig is a shade lower, although stocks at Glasgow are reported as very small, and a large body of the men still remain out on the strike. In Foreign Iron and Steel, nothing new.

COPPER is steady.

TIN.—English continues in fair demand. On Wednesday, 3503 slabs Banca, and 2049 slabs Straits, were offered by public auction, but no sale was made of either; the former was bought in at 88s., and the latter at 85s. to 88s.: since then, Banca has been sold at 86s., and Straits at 84s. and 85s.—TIN-PLATES and LEAD remain without change.

SPELTER.—No sales of the least importance for the last fortnight, and this metal looks dull.

GLASGOW PIG-IRON TRADE, AUG. 12.—The price of pig-iron has slightly declined since our last—caused, no doubt, by the tightness of the money market: were it not for this, iron would command high rates, as the stock has been greatly reduced lately, through the miners' strike, which still continues. This week mixed Nos. changed hands to some extent, at 68s., and 67s. 6d., cash—there is very little iron offering. To-day the market is a shade firmer; we quote No. 3 at 67s., mixed Nos. 68s., No. 1 99s., and 69s. 6d., cash, free-on-board.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL,

FOR THE FIRST SEVEN MONTHS OF 1846 AND 1847.

Metals.		1846.	1847.	*In.* in 1847.	*Dec.* in 1847.
Spelter	*Tons*	4326	1578	—	2748
Copper		2139	2401	262	—
Iron, British		6289	6283	—	6
Ditto, foreign		2112	534	—	1578
Tin-plates	*Boxes*	4139	5994	1855	—
Lead	*Tons*	181	620	439	—
Steel		386	454	68	—
Quicksilver	*Bottles*	255	—	—	255

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—

Silver bars to Belgium	8,500 ounces.
Silver specie to Mauritius	£1,000
Gold specie to ditto	1,000

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic* 1847	*Returns.* 1846
Arbroath and Forfar	15	£179,939	26½	3 *p.c.*	£370	£348
Chester and Birkenhead	15	658,293	41½	2½	1104	1088
Dublin and Drogheda	35	689,248	54	3½	1167	1021
Dublin and Kingstown	7½	473,282	—	9	1333	1208
Dundee and Arbroath	16½	156,323	38	6	—	433
Dundee, Perth, and Aberdeen	47	285,745	33½	6	1227	—
East Lancashire	30½	2,207,490	18¾	—	1133	—
Eastern Counties	226	6,513,026	19½	7	13026	8996
Eastern Union	44	531,021	59	—	1159	402
Edinburgh and Glasgow	48	2,275,435	63	6	4175	4117
Glasgow, Paisley, and Ayr	60½	1,567,281	121	7	2917	2815
Glasgow, Paisley, & Greenock	23	835,918	18½	2	1358	1270
Gt. Southern & Western, Ireland	110½	1,343,718	30	—	2088	—
Great Western	241	9,714,939	109	8	23301	21771
Kendal and Windermere	10½	147,001	24½	—	231	—
Lancaster and Carlisle	70	1,209,913	60	—	1607	—
London and North Western	382	18,042,004	164	10	49333	47696
London and Blackwall	4	1,102,717	6½	1¼	1403	1440
London, Brighton, & South Coast	137½	5,109,667	49½	7	12232	10530
London and South-Western	186½	5,836,132	64	9	11830	8944
Londonderry and Enniskillen	14½	—	24½	—	135	—
Manchester & Leeds	147½	5,036,391	95	5½	9410	7925
Manchester, Sheffield, & Lincolnsh.	49½	1,678,108	89	5	2551	2270
Maryport and Carlisle	28	414,895	—	—	760	560
Midland Company	371	7,862,274	118	7	24894	20105
Newcastle and Carlisle	65	1,184,080	118	5	2754	2134
Norfolk	70½	1,199,689	117	7	2451	1481
North British	78	1,459,958	30½	—	2872	2334
Shrewsbury and Chester	17	591,158	21½	—	501	—
South Devon	29	1,061,283	30	5	1140	600
South-Eastern	157½	5,868,411	35	3½	11411	10180
Taff Vale	38	888,411	—	6½	1513	1078
Ulster	25	358,353	52	5½	827	691
Whitehaven Junction	12	91,274	—	—	263	—
York, Newcastle, & Berwick	228½	3,683,102	—	9	11891	—
York and North Midland	182½	2,483,256	81	10	9991	7114

Total earnings for last week, £200,410, being an increase of £28,612 over last year.

FOREIGN RAILWAYS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic* 1847	*Returns.* 1846
Amiens to Abbeville	28	573,338	—	4	670	—
Dutch Rhenish	57½	—	2½	—	1580	1733
Northern of France	208½	2,000,000	11½	4	12468	6780
Orleans to Tours	72	600,000	—	4	2866	2432
Paris and Orleans	82	2,011,720	50	12½	7698	6989
Paris and Rouen	85	2,082,916	36½	8½	8762	7211
Rouen and Havre	59½	—	2¾	4	3626	—
Strasburgh and Basle (monthly)	88	—	8	1½	8342	8654

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Chester Main 16 3—Davison's West Hartley 17—Dean's Primrose 15 9—Hasting's Hartley 17—Holywell Main 17—South Peareth 15 3—West Hartley 17—Wylam 16—Wall's End Acorn Close 17 3—Bewicke and Co. 17 3—Hilda 16 9—Killingworth 17—Northumberland 16 9—Wharncliffe 17 3—Eden Main 17 9—Belmont 17 9—Braddyll's Hetton 18 6—Haswell 19—Hetton 18 9—Keepier 18 3—Lambton 18 3—Stewart's 18 9—Kelloe 18 3—Thornley 17 6—Adelaide 18—Brown's Deanery 16 9—South Durham 17—Tees 18 3—Whitworth 15 3—Howard's West Hartley Netherton 17—Sidney's Hartley 17.—Ships at market, 76; sold, 67; unsold, 9.

WEDNESDAY.—Adair's Main 15 9—Buddle's West Hartley 17 6—Hasting's Hartley 17 6—Tanfield Moor 17 6—Wall End Bewicke and Co. 17 6—Gosforth 17 6—Hedworth 16 6—Killingworth 17 3—Eden Main 17 9—Braddyll's Hetton 18 6—East Hetton 17 6—Haswell 19—Hetton 18 9—Lambton 18 3—Murton 19—Russell's Hetton 18 3—Stewart's 18 9—Hudson's Hartlepool 18—High Thornley 16 9—Kelloe 18 3—Adelaide 18—South Durham 17 6—Tees 18 6—the Dukes, 17 6—Derwentwater Hartley 17.—Ships 58.

FRIDAY.—Adair's Main 16—Buddle's West Hartley 17 6—Charlotte 16 9—Delaval Hartley 17—Hasting's Hartley 17 6—Holywell Main 16 9—Original Tanfield 15 6—Ord's Redheugh 16—South Peareth 15 6—Tanfield Moor 17 9—Townley 16—Twizel Main 15 6—West Wylam 16 3—Wylam 16 3—Wall's End Acorn Close 17 6—Bewicke and Co. 17 9—Brown's Gas 15 6—Bell and Brown 17 9—Gosforth 17 9—Heaton 17 9—Killingworth 17 6—Wharncliffe 17 9—Eden Main 18—Belmont 18 3—Braddyll's Hetton 18 9—East Hetton 17 9—Haswell 19—Hetton 18 9—Lambton 18 6—Merton 19—Russell's Hetton 18 6—Shotton 18—Stewart's 18 9—Whitwell 17 9—Hartlepool 19—Heugh Hall 17 9—Kelloe 18 6—Adelaide 18 6—Brown's Deanery 17 6—Cowndon Tees 17 3—Richardson's Tees 17—Seymour Tees 18—Tees 18 6—West Tees 17—Cowpen Hartley 17 6—Derwentwater Hartley 17—Howard's West Hartley Netherton 17 6.—Ships, 95; sold 86.

EXPLOSION OF GUNPOWDER.—Another exlosion took place at Messrs. Hall's Powder-mills, Feversham, Kent, on Thursday night, at 12 o'clock; it was one of the green-charge houses, where the powder is kept before it is ground. The building being purposely built of slight materials, the accident was not attended with serious consequences. The building is very much shattered, but fortunately all the workmen escaped without injury. This makes the third explosion within about three months.

OIL FROM STONE.—A communication was made some short time ago to the French Institute, about what was called *huile aux pierres*. The oil is perfectly clear and transparent, does not soil, and yields a flame of great intensity and clearness. A company, formed for the manufacturing of this mineral oil, possesses, in the vicinity of Autun, inexhaustible strata of rock, from which not only oil, but other valuable substances, as a sort of grease (*graisses*), tar, ammoniacal water, paraffine—substances of which some are valuable as manure,—are extracted.—*The Builder.*

COAL AND IRON AT YATTON.—We noticed some time since, the discovery of a vein of coal on the estate of J. H. S. Pigott, Esq., of Clareham, in the above parish. Since then, by continued boring, two other veins have been discovered, one about 9 in. thick; and a third, which was come to on Saturday last, about 40 fms. below the first, 2 ft. 4 in. thick. Six veins of rich iron ore, yielding about 60 per cent. of metal, have been found on the same gentleman's property, at Kingswood, a mile from where the coal is being worked. The veins of ore come very near the surface, and are apparently inexhaustible.—*Monmouth. Mer.*

SOUTH SYDENHAM, DEVON.—POSITIVE AND UNRESERVED SALE OF MINING MATERIALS.

MR. RENDELL will offer FOR SALE, BY PUBLIC AUCTION, on Thursday, the 19th day of August inst., by Twelve o'clock at noon, at WHEAL CONCORD, in the parish of SOUTH SYDENHAM, in the county of Devon, all the

REMAINING MINING MATERIALS,

Consisting of a WATER-WHEEL, 18 ft. diameter, 2½ ft. breast; crusher; 9 9-in. pumps; working barrel; clack door-piece and windbore; 2 9-ft. and 1 3-ft. 8-in. pumps; working barrel; clack door-piece and windbore; 5 10-in. pumps; shaft bob and iron rods; 30 fm. ladders; shaft gig; 2½ tons of new iron; smith's bellows; 26-in. anvil; vice and smith's horse; scales, beam and weights; large beam and scales and stand; screw plates; plates and taps; smiths' tools; forge trough; chest; cupboard; lot of chain; stable and sawing house; 6 pieces of new rods; lot of water barrels; 5 flat-rod sheaves; bell and stand; doors and windows to smiths' shop and sump-house; gates to yards; lot of launders; grinding-stone and stand; three pair of yokes; cast-iron; cranks; tyes; hutches and dressing-floors; quantity of new and old timber; pair of blocks and rope; tool house; doors, windows, and lead floors; carpenters' shop; doors and flooring; underground screws for lifting weights; dial, chain, and case of instruments; dressing tools; lot of new plank; 2 horse whims; 1 whim rope; 2 whim pullies; 2 whim kibbles; landing and other barrels; large quantity of brick; lot of useful iron; carpenters' bench; 12 miners' chests; 3 bags of nails; 2 boxes of candles; 2 cwts. powder; and numerous other articles.

Also, at the same time and place, will be offered for sale, all the present adventurers' interest, and right to search for minerals, in the sett, or grant, called WHEAL CONCORD, aforesaid, for the remainder of a term of 21 years, 18½ of which are now unexpired.

The Auctioneer solicits an early attendance, as he intends selling the above without the least reservation.

Any further information may be obtained of Captain OPIE, the resident agent, on the mine; of Messrs. LITTLE and WOOLCOMBE, Solicitors, Devonport; or of Mr. SNELL, Solicitor, Callington.—Dated Callington, August 12, 1847.

LEAD ORES

Sold at Truro, on the 6th August, 1847.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
East Wheal Rose	82	£13 8 0	Walker, Parker, & Co.
ditto	81	14 0 0	Michell & Son.
ditto	82	11 15 6	Tamar Smelting Co.

Sold at Holywell, on the 12th August, 1847.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
Maeseryrwddw	42	£10 15 6	Newton, Keates, & Co.
ditto	13½	11 2 6	Mr. Eyton.
Coetia Llys	17	11 5 0	Walker, Parker, & Co.
Milwr	5	11 0 0	Mather & Co.
ditto	1	11 0 0	Walker, Parker, & Co.
Hendre	45	10 10 0	ditto
ditto	16	10 6 6	Mr. Eyton.
ditto	16	10 15 6	ditto
ditto	6½	10 8 0	Walker, Parker, & Co.
Deep Level	38	10 17 0	ditto
Clase	22	28 2 6	Newton, Keates, & Co.
ditto	8	16 3 0	Walker, Parker, & Co.
ditto	¾	13 0 0	Newton, Keates, & Co.
Total	240¾ tons.		

BLACK TIN.

Mines.	*Tons.*	*Price per ton.*	*Purchasers.*
Bottle Hill	2	£41 0 0	Williams and Co.

COPPER ORES.

Sampled July 28, and Sold at Andrew's Hotel, Redruth, August 12, 1847.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Carn Brea	111	£6 0 6	Par Consols	101	£9 8 6
ditto	105	5 14 6	ditto	70	5 16 6
ditto	99	5 4 0	ditto	59	8 8 6
ditto	89	5 19 6	Wh. Rodney	59	5 5 0
ditto	87	4 10 0	ditto	42	3 5 6
ditto	86	10 3 6	ditto	30	1 1 6
ditto	84	11 2 6	Wh. Tremayne	51	3 16 0
ditto	74	8 10 6	ditto	36	8 6 6
ditto	73	4 7 6	ditto	27	8 15 0
ditto	72	8 18 0	ditto	16	2 7 0
ditto	71	9 19 0	Wh. Agar	39	2 1 6
ditto	70	11 1 6	ditto	38	7 12 6
ditto	36	1 12 6	ditto	20	1 12 0
ditto	16	12 10 6	Gwinear Consols	51	1 19 6
ditto	2	36 15 0	ditto	37	1 19 6
Wh. Prosper	71	4 15 0	ditto	2	7 7 0
ditto	64	4 5 0	North Wh. Basset	65	4 1 0
ditto	60	5 2 6	Wh. Jane	32	2 6 6
ditto	59	1 15 6	ditto	10	5 5 6
ditto	56	7 8 6	Trenow Consols	40	5 7 6
Wh. Friendship	9	4 0 6	Wellington Mines	24	5 7 6
United Hills	100	4 15 6	ditto	11	13 10 0
ditto	71	4 0 6	Carn Perran	11	7 12 0
ditto	53	5 9 0	ditto	10	2 15 6
Wh. Sparrow	89	3 19 0			

TOTAL PRODUCE.

Carn Brea	1075	£7922 13 0	Wh. Agar	97	£402 13 6
Wh. Prosper / Wh. Friendship	319	1473 10 0	Gwinear Consols	90	188 10 0
United Hills / Wh. Sparrow	313	1403 13 6	North Wh. Basset	65	263 5 0
Par Consols	230	1856 15 0	Wh. Jane	42	127 3 0
Wh. Rodney	131	479 11 0	Trenow Consols	40	215 0 0
Wh. Tremayne	130	767 7 0	Wellington Mines	35	277 10 0
			Carn Perran	21	111 7 0

Average Standard £106 16 0 | Average Produce 6¾

Average Price per ton £5 19 0

Quantity of Ore 2588 tons. | Quantity of Fine Copper, 211 tons 13 cwts.

Amount of Money £15,488 18 0

LAST SALE.—Average Standard £111 6 0.—Average Produce 7½

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Mines.	Tons.	Amount.
Mines Royal	199	£965 4 2
English Copper Company	346	1826 5 3
Vivian and Sons	759	3968 4 9
Freeman and Co.	468	2494 1 2
P. Grenfell and Sons	217	1246 14 6
Sims, Willyams, and Co.	212	1066 6 2
Williams, Foster, and Co.	385	3922 2 0
Total tons	2588	£15,488 18 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Devon Great Consols, Wheal Maria, Wheal Fanny, and Wheal Josiah 1140—West Caradon 322—Fowey Consols 310—Wheal Friendship 235—Marke Valley 130—Bedford United Mines 104—Holmbush 64—Wheal Gorland 12.—Total, 2317 tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—United Mines 1170—South Caradon 354—Tresavean 286—Par Consols 283—West Wheal Jewel 184—Treleigh Consols 174—West Trethellan 80—South Tolgus 35—North Downs 16—East Downs 9.—Total, 2591 tons.

COPPER ORES

Sampled July 21, and Sold at Swansea, August 12, 1847.

Mines.	Tons.	Prod.	Stand.	Price.	Mines.	Tons.	Prod.	Stand.	Price.
Knockmahon	115	9¾	102¾	£7 15 0	Cronebane	36	4½	120	£3 6 0
ditto	111	8¾	104½	6 18 0	ditto	18	6½	109¾	5 3 0
ditto	101	7½	108½	6 0 0	ditto	17	5	116	3 11 0
ditto	100	4	124½	2 14 6	ditto	9	5	116	3 11 0
ditto	52	7½	108	5 11 6	Copiapo	123	25¾	90	20 18 6
Chili	60	49¾	83¾	39 1 0	ditto	80	26½	87¾	20 14 6
ditto	59	49¾	85½	40 2 0	Cuba	105	15¾	94½	12 5 0
ditto	58	46½	84¾	37 3 6	ditto	52	23	89½	18 5 0
ditto	52	47½	81¾	36 8 6	Glasgow Slag	39	3¾	129¾	2 2 6
ditto	50	49½	80½	37 10 0	ditto	38	3½	124¾	2 8 6
ditto	49	45	82½	34 15 0	Burra Burra	31	27½	89½	22 3 6
ditto	43	49½	82	38 6 6	ditto	10	36¾	86	30 2 6
Cobre	103	14	95	11 1 0	ditto	6	25½	88½	20 2 0
ditto	96	13½	95¾	10 18 6	ditto	4	25½	87¾	20 3 0
ditto	50	23	87	17 15 0	Princess Royal	50	24½	90½	19 18 6
ditto	43	23½	87	18 0 0	Ballymurtagh	47	5½	117¾	4 4 0
Cronebane	109	6	113½	4 11 0	Vine Slag	20	5½	111½	3 9 0
ditto	94	4¾	119	3 8 0					

TOTAL PRODUCE.

Knockmahon	479	£2825 11 0	Glasgow Slag	77	£175 0 6
Chili	371	13984 17 6	Burra Burra	51	1189 17 6
Cobre	292	3848 9 0	Princess Royal	50	996 5 0
Cronebane	283	1119 7 0	Ballymurtagh	47	197 8 0
Copiapo	203	4231 15 6	Vine Slag	20	69 0 0
Cuba	157	2235 5 0			

Total tons, 2030.—Amount of money, £30,872 16s. 0d.

Copper ores for sale August 26.—Cobre 96, ditto 91, ditto 86, ditto 72, ditto 44, ditto 6.—Knockmahon 119, ditto 103, ditto 63, ditto 61.—Burra Burra 76, ditto 67, ditto 60, ditto 50, ditto 16, ditto 3, ditto 53.—Berehaven 108, ditto 96, ditto 92.—Cuba 93, ditto 85, ditto 65.—Cronebane 53, ditto 41, ditto 38, ditto 26, ditto 24, ditto 4, ditto 2.—Tigrony 2.—Copiapo 93, ditto 63, ditto 46.—Kapunda 96, ditto 52, ditto 14.—Holyford 90, ditto 50.—Sydney 92.—Chili 61.—Lackamore 30, ditto 11.—Aberdovey 24.—Ballymurtagh 4.—Total, 2521 tons.

The following are the Companies by whom the Ores were Purchased, at the SWANSEA SALE of August 5, 1847:—

	Tons.	Amount.
English Copper	345½	£5232 6 0
Freeman and Co.	173	2167 5 0
Grenfell and Sons	90	1806 15 6
Sims, Willyams, and Co.	293½	7190 11 6
Vivian and Sons	575½	5304 16 0
Williams, Foster, and Co.	392	7946 2 6
Total tons	1875	£29,649 10 0

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed—

To the Editor,
Mining Journal Office,
26, Fleet-street, London.

Also, to avoid trouble, Post-Office Orders should always be made payable to William Salmon Mansell, as acting for the proprietors.

"A Subscriber" (Morley's Hotel) can obtain all the particulars he requires on application to the secretary, at the offices of the company, George-yard, Lombard-street.

Some observations on the Australian Mines, and also on the Wheal Concord and Wheal Walter Mining Companies, will appear in our next Journal. With reference to the latter, we court information from authentic sources, as the communications we have received are from private channels, although we believe such may be relied upon.

"A Reader" can obtain the best work on the subject, on application to Mr. Weale, the bookseller, of High Holborn.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, AUGUST 14, 1847.

It may appear a rather strange anomaly, that gold and silver form one of the most important and valuable articles of our exporting commerce to France, Hamburgh, &c.—these countries being constantly necessitated to import their precious metals from England, not being able to obtain them from Russia to a sufficient extent. This island is looked upon as the great emporium of the world, as by the enterprising spirit of our capitalists and our adventurous miners, we may safely say we possess nearly the whole of the mines of Mexico, Chili, Peru, Columbia, Brazil, and the Havana, where ore is to be found by persevering industry—although many of them had been worked centuries ago by the aborigines and the conquering Spaniards, yet were abandoned by them with despair, not having, as we have in the 19th century, the benefits of all the improvements in machinery of every description, to carry out gigantic explorations. Had it not been for the immense metallic wealth we possess, railways, the building of steam-vessels, and, lastly, unfortunately, the necessitous speculation in corn, in consequence of the great scarcity which has existed during the last season, would have crushed, and rendered bankrupt, any other power but England, as all the vast cargoes of grain of every description from Odessa, Egypt, the Baltic, and the United States of America, had been paid for in *hard cash*, not in paper, or by manufactured goods. When any foreign power is in difficulty, it is to our Bank and capitalists that they resort for loans and advances of the circulating medium. It is to these heavy calls upon the bullion and specie for railway speculation and exportations, that the quantity has so greatly decreased; the old and true saying verifies, that "money makes money," and our bankers and bullion dealers will always make the most they can of the precious metals, irrespective of the object or destination—being as much an article of commerce as manufactured goods.

Within the last fortnight, nearly 2,000,000*l.* sterling in gold ingots, silver bars, and specie, have been exported to France, although not enumerated in the Custom-house returns. There is not a packet sails from Liverpool to Boston, or New York, but takes out a considerable sum of specie, averaging, within the last six months, to nearly 3,000,000*l.*; to our own colonies, the Cape, West Indies, New South Wales, the Mediterranean, and the Levant, a large quantity has also been taken from the metallic resources of the country. According to the returns of the Bank of England, for the week ending Saturday, July 31st, 1847, the gold coin and bullion in the Issue Department is stated at 7,583,022*l.*; and the silver bullion at 1,083,903*l.*—total, 9,666,925*l.*; and in the Dividend Department the amount of gold and silver coin is stated at only 664,325*l.*; and notes issued, 22,666,925*l.*—whilst less than three years ago the bullion and coin averaged from 15,000,000*l.* to 16,000,000*l.* It is true that very large sums in gold, silver, and bars, have been drawn out from the coffers of the "old lady of Threadneedle-street" for railway purposes; but, at the same time, it is well known that the exportations, or "a trip to Paris," have also been immense, and which has induced the directors to adopt the impolitic expedient of raising their discount minimum interest from 3½ and 4 to 5½ per cent. Such a measure has created no little consternation and great inconvenience to parties in the City, Liverpool, Manchester, Birmingham, &c., who, relying upon the bank not increasing their rates for money, have speculated far beyond what they would otherwise have done, and now have some difficulty in meeting their acceptances by such an enormous rate of interest being demanded.

If it be true that during the feverish excitement of speculation, shares rise too high in price, and exceed their legitimate value, it is no less true that during extraordinary pressures in the money market they fall too low, and are to be purchased much under their legitimate worth. The present moment clearly shows this. The panic has extended to mines; and shares which but a few months since commanded high prices in the market, are now unsaleable at much lower quotations—whilst, in many instances, the mines, through discoveries, are worth intrinsically more. Much of this depression, we believe, has been caused by the elections, and the withdrawal of money from investments. The failures, too, owing to over speculation in articles of food, have frightened, for the moment, those who have capital; and they have buttoned their breeches pockets, to "bide their time," for bargains that may be forced upon the market. We hope, however, our mining friends will be firm—this is a time to buy and not to sell; and ere many weeks are passed the market may, and, from slight symptoms we have observed, will, improve, and much higher prices may be realised. Within the last few days we have heard of improvements in East Pool, in Callington, and in one or two other mines; and, in spite of the general depression, there have been great rises in the shares, clearly showing we want but a little life in the market and in the mines, to make things better.

Just previously to the commencement of the elections, we suggested to the constituencies of Cornwall the propriety of choosing their Members, with a view, among other things, to the promotion of a Central Railway for the county. The electors of Bodmin have promptly and heartily accepted that counsel, and dismissed their respectable, but erring, representative, Sir S. Spry, because he supported the line to Plymouth, and have placed in his seat a gentleman, a comparative stranger to them, chiefly because he engages to exert himself to procure a *great central* traffic route for the district. We congratulate the free burgesses of Bodmin on their earnestness in this important question, and that they have fully made up their minds neither to be any longer thwarted or trifled with by their Members, on a subject which so intimately concerns their obvious and every day interests. We are not without hope of hearing, before the elections are over, another declaration or two as significant as this, in favour of the common sense and common necessities of the county in this matter. Suppose the Government proposal, to erect Cornwall into a diocese, takes effect, and Bodmin becomes a cathedral town, with all the incidental foundations of canonries, deaneries, and prebendal residences, as matters now stand, this new centre of ecclesiastical authority and spiritual instruction will be cut off from the great field it is meant to fertilise, except in so far as it can reach the arena of its labours, by a common tramroad or a single horse-path, or something intermediate between both, and a deal more useless, because a deal more dilatory. The Member who has displaced the misjudging baronet is chosen with an especial eye to his furthering the railway interests of his constituents; and we do not doubt that his intimate knowledge of what the county, no less than his own borough, requires in this particular, will make him, in the next session of the Legislature, an active and successful railway tribune.

In our columns of to-day, will be found several references to the subject of the Britannia Bridge, now in course of erection over the Menai Straits—the most important and interesting of which is contained in our report of the half-yearly meeting of the Chester and Holyhead Railway Company, including the report of Mr. R. Stephenson, M.P., and the observations he made to the meeting. It will be seen, that the several gigantic works rendered necessary on this line, from the peculiarly mountainous nature of the country, are all rapidly progressing towards completion, and 40 miles of permanent way finished. With respect to the broken bridge over the Dee, Mr. Stephenson proposes to reinstate the fractured girder, and to support the entire of the iron work with trussed timber supports, which will, undoubtedly, increase its stability, and render it comparatively safe. On the subject of the Britannia Bridge, Mr. Stephenson spoke at some length, and expresses himself with entire confidence as to the success of the plan he proposes, and safety of the structure when complete. One of the tubes for the Conway Bridge is nearly finished; and as this will be of similar construction to the Britannia, it may form some criterion of the facility with which the latter may be raised. At all events, the works are now assuming a position which becomes highly interesting—and, if successful, will certainly vie with the proudest structures this country can boast, even with its brother bridge the Menai, which has immortalised the name of Telford. It is but justice to Mr. Stephenson, to call attention to the statement made by him, that only two or three engineers are aware of the plans he proposes for raising the structure—that neither General Pasley, or any of the numerous contributors to the public press, can possibly be aware of his intentions—and that, therefore, their strictures are premature Mr. Stephenson has, however, given the hint, that his machinery is very complicated, and we trust it will not prove *too* much so for the success of the plan. We wish him every success, but shall watch, with much anxiety, for the result. A letter, signed "Civil Engineer," on the subject, in another column, is worthy of perusal.

Some of our readers will have noticed, with great satisfaction, a short account, in a recent number of this Journal, of a most cheering improvement in the tin and granite works at Constantine, near Helston. For ourselves we can confidently say, that we know the district to be rich in materials which may be wrought into a greatly-increased revenue, to all interested in the raising of granite and tin ores; and that when so raised, they may be brought from their field, extensive and deep though it be, for shipment to the water side, at a comparatively small expense. *Helford* should be by position and capacity the port of *Helston* and its neighbourhood. It is the only sea outlet presenting itself to the trading wants of that borough and its vicinity. We should say, though we have no table of soundings, to which we can at present refer, that there is a fair depth of water in this river, at all times of tide, as high up as the Ferry. If, at that point, a wharf on wooden piles, or a stone pier, was erected for the convenience of the river craft and coasting vessels, whose business lay up and down its waters, we think such an erection would prove itself to be an effectual nucleus, around which the ordinary concomitants of a port and harbour would soon accumulate.

We understand that a deputation of shareholders in Dartmoor Consols, accompanied by the engineer to the company (Hiram Williams, Esq.), has just returned from a visit of inspection; and we announce, with gratification, that the works are proceeding with rapidity, and that the genuine character of the mine is most promising. Mr. Williams, having been employed by her Majesty's Government to inspect the mineral resources of Borneo, and being known in this country as an experienced mineral engineer, will now be enabled to report on this tract of country—the resources of which have been so long neglected. We have always looked upon this as a promising undertaking; and we hope, next week, to furnish the official report by one so well qualified to give it, and to which we attach some interest.

[FROM A CORRESPONDENT.]

We are pleased to observe the good effect of the mode adopted of selling ores at Aberystwith by sample. It will be observed, by referring to the sales, that the Holywell smelters are outbid, and a better price obtained than would have been given at Holywell. The late fall in the price of lead ores is mainly to be attributed to the fact of an extra quantity coming together (accidentally) into the Dee to the ticketing, of which the parties there took advantage, and bid a reduced price; but it is now admitted on all hands, that the home consumption is so good, as to afford an advanced price—and lead is expected, in spite of the shock of the money market, to rule higher—silver-lead ores more especially are expected to go up to higher prices than have been received of late years. The fact of corn being reduced to one-half the price that has been given, must have a tendency to reduce the expense of mining operations, and render those speculations, which have already shown profit, as well as those which are in a position to be profitably extended, objects of interest to investors.

Mining in France.—We have before alluded to the impetus for mining enterprise that has recently arisen among our Gallic neighbours, in consequence of the increased demand for iron, and every description of metallurgic produce, and the monopoly which exists in the hands of a few rich mineholders, and Government restrictions, to the great injury of the public at large, and the development of that important branch of national industry. Capitalists now find that railways no longer offer them a lucrative investment for their funds, and, consequently, have turned their attention to encourage the exploring of the mineral riches of the earth. The Royal School of Mines at Paris has sent out experienced engineers to nearly every part of the globe to make researches, which have proved highly satisfactory. A commission of mining adventurers, under the sanction of Government, went out to Tunis and Morocco at the latter end of last year, to explore those hitherto-unknown mineral portions of Africa, with permission of the Bay of Tunis and the Emperor of Morocco. From the reports of those scientific gentlemen, it appears that gold, silver, iron, lead, copper, cobalt, and coal, exist, to a very great extent, in both territories. A company has been formed in Paris for the working of the mines of Morocco, having previously obtained, through the means of the French Consul, a concession from the Emperor, who is anxious to give every encouragement to the enterprise, as a proof of his friendly feeling towards France. The Bey of Tunis, during his recent visit to the French capital, expressed the great desire he had that his States should be explored by some of the members of the Royal School of Mines, which wish was eagerly complied with; and there is little doubt but, in a few years hence, we shall hear of mining works being undertaken by Europeans, even in that part of the globe, to a great extent, should peace happily continue. In Hungary, Silesia, and Prussia, several French adventurers have obtained large concessions, and have already established furnaces, and commenced working; the result of the yield of the ores is highly satisfactory; and the great advantage to their pursuits is, that coal and wood abound close to the spot, labour and provisions extremely cheap, and the population industrious and frugal. The Emperor of Austria, and the King of Prussia, have done more for the development of mining science than any of their predecessors would have done, who were constantly harassed by war and foreign invasions. The blessings of peace are daily improving the social state of man, by not only affording him the opportunity of expanding his industry, but the progress of steam machinery to assist him in overcoming those difficulties which formerly dismayed him.

The Albion Plate Glass Company.—In the *Mining Journal* of the 21st Nov., 1846, we laid before our readers some account of the state of the plate glass manufactory of England, with statistical remarks, showing the extraordinary increase which had taken place in the demand—the seven houses in England employed in that manufacture being obliged, with little exception, to keep their works constantly going night and day, and that even then they could only supply orders from hand to mouth, and found it impossible to keep any amount of stock on hand. We also then called attention to the approaching formation of a new company, for the manufacture of plate glass, by gentlemen of capital connected with the glass trade, and which we then considered as offering good returns for the investment of capital; at the period mentioned the sales were 45,000 ft. per week; in 1844 they were only 23,000 ft. per week; they have since gradually increased, and are now, with the entire remission of the Excise duties, 55,000 ft. per week. This company is now formed, and it is intended, in the first instance, to commence operations with from 4000 to 5000 ft. per week, which may be increased to any quantity as may be desirable; the works will be carried on in the neighbourhood of London, on the banks of the Thames, whose sands are so well adapted for producing a superior article, and the capital is fixed at 100,000*l.*, in 4000 shares, of 25*l.* each.

Liability of Shareholders—Wheal Kitty.—On Monday week, an action was tried at the Cornwall Assizes, to recover 60*l.* 3s. 10d., for candles alleged to have been supplied to Mr. Macnamara, the defendant, as a shareholder in the Wheal Kitty Mine. Mr. Hitchens's (the plaintiff) case was, that the goods were supplied upon the order of the purser to the mine, between the months of November, 1841, and February, 1842—the custom being for pursers to incur debts on account of the mines they are engaged in, and afterwards to obtain money from the shareholders. In the month of July, 1836, the defendant was at Wheal Kitty Mine, and he then made inquiries respecting its prospects. He also attended meetings of the shareholders, and frequently went to the office in London for the purpose of examining the accounts, and receiving dividends. No dividends, however, were paid after the year 1837, but repeated applications were made to the defendant to pay the amount of his call; and he excused himself on the ground that he had had a great many losses, and that he did not consider the mine had been properly worked. In the year 1841, the defendant made a similar excuse; and a letter was put in (dated 23d January, 1837), from which it appeared that he had requested a Mr. G. Swan to transfer one of his shares in the Wheal Kitty Mine, to Capt. J. Lyle. The learned counsel cited an authority to prove that this evidence was sufficient to entitle the plaintiff to a verdict, notwithstanding the fact, that other persons besides the defendant were shareholders in the same mine. On the part of the defendant, no witnesses were called; but it was contended that the mine was conducted upon the Cost-book Principle, and that the custom was, not for the purser to incur debts before receiving the money, but to have subscriptions in hand, in order that the shareholders might not be in debt. Upon this ground the learned counsel urged, that in the present case there was no implicit authority from the defendant to the purser; and that, therefore, the plaintiff had no right to recover, inasmuch as he must have been aware that a restriction existed as to the mode of expending the money of the shareholders.—Mr. Justice Williams, in his summing up, told the jury they were to consider—first, whether the defendant was a shareholder in Wheal Kitty; and secondly, whether the candles were supplied to the purser under a contract, express or implied, made by defendant. The jury found a verdict for plaintiff, damages 60*l.* 3s. 10d.

"Kitting" at the United Mines.—At the Cornwall Assizes, R. Kendall, and D. Burgan, were indicted for stealing, on the 25th of July, at the United Mines, Gwennap, a quantity of copper ore, the property of William Francis and others. Mr Merivale conducted the prosecution, and Mr. Collier the defence. The two prisoners were tributers in the United Mines, having a pitch at the back of the 155 fm. level, at 10s. in the *l.*—near them, in the same level, there were tutwork men at work. On Sunday, the 25th of July, a sumpman, called Goldsworthy, was watching on the mine, and about half-past 11 at night, he heard the sound of a tram-waggon; he went into the plat, and 155 fm. level, and found waggons there that had been lately worked; he then went to grass by the man-engine, and proceeded to the barracks, but found no one there. He told Capt. Moyle, who desired him to go to the dry-house, and he afterwards saw six men come out of the barracks; Capt. Moyle came up, and the men ran away—he and Goldsworthy pursued, and overtook the prisoner Kendall. On being questioned, Kendall said he was going underground early, in order to come up early, and assist his brother to till some corn. The captain gave Kendall into custody, and afterwards went underground, where he found that ore had been thrown into the prisoners' pitch with a shovel; there were two heaps there, the ore of one unlike that of the other. He afterwards examined the chests in the changing-house, and found the prisoners' every day clothes there—the prisoner Burgan was one of those that ran away on Sunday night. On Tuesday afternoon, Capt. Francis, and Capt Moyle, went underground to take samples—the prisoners went with them to their pitch; Capt. Moyle told them to take samples whence they pleased, and they did so from the pile of stuff they had broken. A man called Treweeke, deposed that ore had been stolen from the adventurers' heap between Saturday and Monday morning. Samples of ore from the adventurers' and prisoners' piles were produced in court, and it was upon the alleged similarity of these that the case depended.—Mr. Collier cross-examined the witnesses at considerable length, and then addressed the jury, contending that the similarity of the ore in the adventurers' and prisoners' piles was not proved. The jury retired from the court, and after a long deliberation returned a verdict of "Not Guilty."

Copper Mines in Scotland.—Very extensive copper mines have been discovered on Carwinning Hill, in the neighbourhood of Kilbirnie. The ground is the property of Mr. Theophilus Paton; and Mr. Bennet, an extensive English miner, is at present on terms with the proprietor for a lease.—*Edinburgh Witness.*

Progress of Mining.—The following is a communication addressed by a correspondent, "A South Wales Collier," to the *Monmouthshire Merlin*:—"History does not inform us at what time or period the operation of mining commenced. It is evident, however, that where minerals were first discovered, the natives did not content themselves with what they found in a native state on the surface of the earth, or beds of rivers and ravines, formed by torrents, but applied themselves to subterraneous operations, in following the veins, which would require some mode of communication and ventilation. Job says: "There is a vein for the silver, and a place for the gold, where they find it; iron is taken out of the earth, and brass is molten out of the stones." So that the art of mining must have been practised in the early ages of the world. It is supposed that Job alluded to the Arabian Mines, which, doubtless, in those days contributed much to the wealth of that country, though it does not appear at present to be rich in metals. The ancient accounts of the metallic wealth of Spain, vouched by the Phœnecians, Carthagenians, and Romans, cannot be doubted, though little of that wealth is now to be found in those countries. Political changes and internal commotions have paralysed the spirit of enterprise; arts and sciences have sunk into decay, and under despotic governments can never be expected to revive, or keep pace with such a country as Great Britain, which now stands, in reference to the inferior metals, pre-eminent in the department of her mineral resources, and has every reason to expect to maintain her proud position, whilst she enjoys the benefit of reciprocal intercourse with other nations, and largely administers to their necessities and comforts. The extensive manufacture of iron, and the various forms and purposes into which it is converted, with the produce of the most useful of all minerals—coal—places the principality of Wales in a position unequalled by any other part of the British dominions. The quality of the latter for smelting iron and for marine purposes, is held in the highest reputation; whilst the quantity and good quality of the iron mines, and the proximity of the manufactories, and ready transit by railway and navigation, to the sea-ports, contribute much to its success. The unremitted toil and perseverance of the English and Welsh miners, give this county the advantage over most others. Though they have their vices, like other men, I believe them to be superior in skill and foresight, and that there is no doubt but they will keep the lead of their trans-Atlantic brethren in the art of mining, notwithstanding they derive their origin from them, as the tide of foreign emigration is incessantly pouring in upon them from all parts of Europe, and will eventually destroy the homogeneousness of their race, and the mining and mercantile spirit of Great Britain will be able to maintain the ascendancy. That there has been a considerable improvement effected in the mining districts of Wales during the last 20 years, cannot be questioned. The sites of some of the old works were injudiciously selected, being at the extremity or cut-crop of the measures, and the prolongation of the workings and extreme length of levels depending on horse-power, has proved very expensive to the proprietors. Water-power has been introduced, and works well where the water can run off from the bottom of the shafts, without additional machinery to lift it to a higher level. New works should be placed in the centre of the minerals, and steam-power made available. Steam-engines are got up at a far less expense now than formerly; and the coals used for working them is of little value to the proprietors, being very seldom marketable coals. Some of the shafts may be deep, but going through all the measures would afford them an opportunity of selecting the most profitable. Legislative interference by enactments, I fear, will do little to promote the mining interest, though wonderfully advocated by theorists and scientific men. I saw noticed in the papers, that a bill for regulating the working of collieries has been introduced into Parliament, which, if allowed to become the law of the land, would be tantamount to a veto upon the further working of coal mines in that district. Then, educating the working man is to crown the whole. A certain amount of labour must be performed; and my opinion is, that education will never do that, by taking it from the arms and putting it into the head. The most useful and best-working miners I find amongst the youthful part of them—those that have received a religious education in the Sabbath schools, who have also learnt to labour truly, to get their own living, and to do their duty in that station in which Providence has placed them."

On a Remarkable Action of Ozone, Chlorine, and Bromine, upon some Salts of Manganese and Lead.—Prof. Schönbein detailed some experiments, which went to prove the oxidising powers of ozone on salts of manganese and lead. Upon adding ozonised air to solutions of the sulphate or chloride of manganese, and agitating the vessel, ozone disappears, and a hydrate of the peroxide of manganese is precipitated. This effect is not, however, produced by the action of either chlorine or of bromine in the dark; but by exposure to the light these elements act in a similar manner to ozone. Incidentally to these experiments, it was stated, that strong nitric acid is rapidly decomposed by muriatic acid, even at a temperature below zero, into hyponitric acid, chlorine, and water; whilst chlorine and hyponitrous acid are transformed into nitric acid and muriatic acid.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

The Compagnie Generale of the Mines of the Loire is about to publish, in one of the Parisian journals, its reply to the attacks which have been made upon it for dismissing several hundred of its miners. I have been favoured with a copy of this document, which, perhaps, may be considered worth translating, as many of your readers hold shares in the company, and many others are interested, directly or indirectly, in its proceedings. "Last winter (says the company) we gave an extraordinary impulse to the working of our pits, in order to afford employment to the working classes, and to new men who applied to us for work. We even established night gangs, so that the labour in the pits might never cease. The consequence of this was, that we had a much larger production of coal than usual; and, although the sale has increased 10 per cent. in the first half of the present year, compared with the first half of the last, we have still on hand a double stock, amounting to upwards of 120,000 hectolitres of coal. In some points the coal, assembled in too large masses, threatens to take fire; and this was an additional reason for dismissing some of the men—but this dismissal will be less important to them at this period, as the labour of the fields will afford them occupation; besides, the number actually dismissed is not so great as has been stated."

The shares of the company are not, I understand, at quite so high a figure as formerly; and it is said that this circumstance has alarmed the directors, and caused them to relax somewhat the working of the pits; but there can be no real reason for disquietude at the falling off in value—for there is no question that it is only temporary, and caused by the commercial crisis occasioned by the dearness of food, and the consequent scarceness of capital. Railway shares, even some that pay 8 and 10 per cent., or that are certain to pay as much, have also declined in value; but the directors of the railway companies have not considered it necessary to take any measures on that account.

The *Moniteur Industriel* puts forth the following statement to prove that the manufacture of iron, and the production of coal, "develope themselves with sufficient rapidity to be capable of supplying the wants of the country—that they merit the protection they enjoy—and that they ought not to be considered as hot-house plants:"—

Yrs.	Cast-iron, met. quintals.	Iron, met. quin.	Coal produced, met. quin. *Millions.*	Coal imported, met. quin. *Millions.*	Coal consumed, met. quin. *Millions.*
1787	——	——	2	2	4
1802	——	——	8	1	9
1818	——	——	9	2	11
1824	1,976,000	1,417,000	13	5	18
1830	2,064,000	1,484,000	19	5	25
1835	2,948,000	2,095,000	25	8	33
1840	2,478,000	2,274,000	30	13	43
1841	3,771,000	2,637,000	34	16	50
1842	3,994,000	2,848,003	36	16 7-10	52 7-10
1843	4,226,000	3,084,000	37	16 6-10	53 6-10
1844	4,272,000	3,150,000	38	17½	55
1845	4,389,000	3,423,090	42	22	63 2-5

This is not the first time the preceding table has been published; but often as I have read it and studied it, I have never yet been able to make out how it supports the arguments which the Protectionists pretend to derive from it. For, what does it show? Why, that in the space of 20 years, the monopolists have been able to turn out 2,413,000 metrical quintals of cast-iron, and 2,006,000 metrical quintals of iron, more than they did—whilst they have rather more than doubled the production of coal, and increased more than *fourfold* the importation of it. A great result, truly! But what has it cost the nation? Counting the ironmasters' monopoly alone at 30,000,000 fr. per annum, which is a very moderate estimate, the cost of these 2,413,000 tons of cast-iron, and 2,006,000 tons of iron, has not been less than 720,000,000 fr. !! Is not that rather dear? If instead of iron, it had been pine apples that had been protected at that rate, would not the *Moniteur Industriel*, supposing that fruit to be as necessary to a nation as iron, have found that the gardeners were making the people pay too much for the privilege of growing their own pine apples?

The following will give a fair idea of the progress and present state of the manufacture of cast-iron in this country:—

Yrs.	Cast-iron from coke, met. quin. *Thousands.*	Cast-iron from charcoal, m. q. *Thousands.*	Yrs.	Hauts fourneaux, wood and charcoal.	Do. coke, or coke mixed with coal & char.	No. of hauts four.
1819	20	1105	1819	348	2	350
1825	44	1911	1834	379	30	409
1830	271	2392	1835	410	28	438
1835	483	2465	1839	445	33	478
1840	771	2707	1840	385	41	426
1841	853	2918	1841	426	42	468
1842	1023	2971	1842	418	51	469
1843	1309	2917	1843	409	61	471
1844	1470	2806	1844	369	61	430
1845	1740	2649	1845	353	79	432

"These figures," says the *Moniteur Industriel*, "show, that from 1819 to 1846, the production of cast-iron by coke has progressed rapidly—that the production by charcoal, nevertheless, increased rapidly to 1843—that the number of furnaces for wood has diminished—and that of those for coke alone, or by coke mixed with other articles, has increased rapidly. In 1819, the average production of a *haut forneau* was 3200 metrical quintals; in 1845, it amounted to 10,160. This great increase must not only be attributed to the creation of a great number of *hauts fourneaux* for coke, but principally to the improvements introduced in the construction and management of the *hauts fourneaux* for charcoal, and especially to the greater power of the *machines soufflantes*."

The following details with respect to the production of what is called *gros fer*, are also extracted from the *Moniteur Industriel*—that production is of the year 1845. A description of the different systems specified will probably not be necessary for your readers:—

Furnaces, &c.		Iron produced. *Met. quin.*	Value. *Francs.*	Value created. *Francs.*
99	Catalonian and Corsican system	97,782	3,866,880	2,967,948
651	The French *Comtois* system	289,412	36,308,135	15,739,137
45	Wallon system	40,902	1,780,031	863,640
14	System called "Nidernals"	4,139	199,466	106,556
81	Comtois system modified	112,560	4,513,948	2,085,497
127	System Champenois	240,163	8,653,535	3,534,658
599	English system—rails	465,391	14,900,254	27,540,640
	" " iron	1,562,332	50,095,600	
34	Treatment of *ribions*	69,942	3,444,455	1,515,201
	Totals	3,422,613	123,762,304	54,452,277

Of the iron thus produced, 1,084,785 metrical quintals were from the exclusive, or partial, employment of vegetable fuel, and 2,337,828 met. quintals from the exclusive employment of mineral fuel. Of the 4,389,000 metrical quintals of cast-iron manufactured in 1845, 2,464,375 were treated by means of charcoal; 184,352 by green wood, either alone, or mixed with charcoal; 362,893 by charcoal and coke mixed; 1,378,070 by coke alone, or coke mixed with coal.

In 1845, the production of steel was 40,047 metrical quintals of what is called *arier de forge*, and 66,963 of *arier de cémentation*. The number of men employed was 50,930—of whom 13,944 in the extraction and preparation of ores, 4864 in the manufacture of cast-iron, 12,547 in that of iron, 16,580 in preparing the different sorts of iron and cast-iron, and 2995 in the manufacture and preparation of steel. The following is given as the proportion of the cost of fuel to the value created, 1000 being taken as the basis:—In the preparation of ores, 0·005; in the manufacture of cast-iron, 0·367; iron, 0·358; elaborations of iron and cast-iron, 0·099; manufacture, &c., of steel, 0·174; average of every branch, 0·356. The following figures show that, notwithstanding the quantity of fuel, necessary to create a certain product, had diminished, the price of fuel increased up to 1839, since which it was going on continually declining, such decline being owing to the diminution in the price of fuel, and to the improvements effected in the means of communication:—

1835	0·391	1840	0·428
1836	0·410	1841	0·414
1837	0·415	1842	0·409
1838	0·458	1843	0·385
1839	0·446	1844	0·378
		1845	0·356.

The weekly letter from St. Dizier, dated the 5th, says:—"Business is as dull as possible. No demands arrive, except for some assortments of bars. This stagnation appears to be general, for the fair at Beaucaire was not more favourable to iron than to other articles. The hope that there will be a good harvest of wine and cider in Bourgogne, Normandy, and Picardy, has caused some demand for *fers en cercles*. The prices of iron delivered at St. Dizier are:—*Fers luminés* of the first class, 370 fr.; *fers battus à la houille*, for Paris, 365 fr. to 370 fr.—for the province, 375 fr.; *essieux bruts*, 370 fr.; ditto *étampés*, 390 fr. to 395 fr.; *bandages percés*, 395 fr. to 400 fr.; iron wire, according to the new tariff, 5 fr. The white cast-iron is delivered at St. Dizier at, on an average, 170 fr., but they appear likely to decline."

From Bordeaux we learn that operations in copper for sheathing were very much restricted during the month of July. The last *mitrailles* sold were delivered at 225 fr. The holders of choice sheets, for which purchasers would be disposed to treat at 226 fr., demand more, and thereby prolong the dullness of affairs in that article. With respect to zinc, the report is, that there are no demands for exportation, and, consequently, no transactions. The zinc of Silesia, amounting in quantity to about 14,000 kilos., is not demanded—the quotation of it is 52 fr. Spanish lead of the first fusion goes off slowly at 54 fr.; that of the second fusion was recently paid for some portions, 46½ fr. The public sale at Amsterdam will fix the price of tin, in which at present nothing of importance is done. The Batavia is paid 260 fr., and the Detroit 255 fr. There is none of Peru, but some is expected.

The mines of Los Santos make a call (the third) of 25 fr. per share, to be paid before the 15th September next.

The shareholders of the coal-pits of Lagon and Loire voted the dissolution of the company at their recent meeting, it having been constituted what is called a *société anonyme*. The proceeding was one of mere legal form.

Matters continue dull in the mining world. This, indeed, is a matter of course, for we are still in the midst of *la morte saison*. The situation of mercantile affairs is not very brilliant, a scarcity of money being universally felt. There are, however, signs of a return to a better state of things, and when that return shall have taken place, mining affairs will, no doubt, attract even more of the attention of capitalists than they have hitherto done.

A radical newspaper, in attacking the Government for its conduct relative to Algeria, thus refers to a topic of interest to your readers:—"Our readers know what Ministers have done with the mineral resources of our colony. The metallic riches, which the Algerian soil contains, is incalculable. Iron of superior quality, copper, lead, manganese, exist in abundance in different parts of our possessions; whilst the Kabyles, with their barbarous systems, and their wretched tools, have worked from time immemorial the mines of their mountains, and manufacture all the arms and agricultural instruments they require—what have we done with our ores? Nothing, or nearly nothing. The copper mine of Mouzaïa is alone worked. A recent law case shows us into what hands it has fallen. The inexhaustible deposits of iron of the Edough are partially conceded; but, of the two privileged companies, one, that of Messrs. Talabot, has done nothing during the two years it has possessed the concession; the other, the Company Bassano, is already obliged to contract a loan, after having disbursed in its preliminary works 750,000 fr. (30,000*l.*) We ask, if all that is very promising for the future?"—*Paris, Wednesday.*

BELGIUM.—It appears, from an official return, that, from 1843 to 1844, the number of accidents which occurred in the mines of Belgium was 775, of which 271 were from fallings in of earth, stones, &c., 159 from different causes, 68 in the use of ropes and chains, 64 from explosions of gas, 47 in the use of ladders, 33 by the explosion of gunpowder, 13 from the rush of water, and 120, which are put down as "accidents in different shafts." The number of returns of these accidents was 580 injured, 546 killed. The greatest numbers killed and injured were from the explosions of gas, and the falling in of earth—the former being 180 injured, 122 killed, the latter 158 injured, 134 killed.

Our mining world continues in a very tranquil state, nothing having occurred that calls for observation. The Coal Company of Jollimet and Roinge-sur-Paturges is called together for 16th Sept.—*Brussels, Tuesday.*

SPECIFICATIONS OF RECENT PATENTS.—We have made arrangements for the regular publication of abstracts of such patents as appertain to the particular branches of science to which our Journal is devoted, as soon after specification as they can be obtained. In another column will be found that of Mr. STEPHEN GEARY, of Hamilton-place, New-road, St. Pancras, architect and civil engineer, for certain improvements in obtaining and applying motive-power, to which we refer, as the first of the series. We may also direct attention to the papers, in course of publication, on the Amendment of the Patent Laws, as of much value to parties interested.

RAILWAYS.—Viscount Clive, in the late Parliament, applied for a return "of the sums which must have been paid up by the several railway companies having purchase, sale, lease, or amalgamation bills, before Parliament during the present session, before those powers can be carried into execution under the sixth resolution of the 10th of June, 1847, relating to railways, and of the amount of such sums which now remain to be paid by each of those companies." The return was ordered on the 11th of June, and was taken from the information given by the various companies to the Commissioners of Railways—it was ordered to be printed on the 21st ult., and was issued on Saturday. The return extends to seven folio pages, and is signed by Mr. Duncan Macgregor, the Registrar to the Commissioners of Railways. It contains the names of 94 companies, and in separate columns the "sums which must have been paid up before the powers of purchase, sale, lease, or amalgamation can be carried into execution" are shown, and also the amount of "such sums which now remains to be paid." By an abstract made, it appears that the sums which must have been paid up amount to 35,773,789*l.* 14s. 8d.; and that the sums, which on the 21st ult. remained to be paid, amounted to 11,830,761*l.* 13s. 10d.

RAILWAYS AND THE POST-HORSE DUTIES.—Returns, moved for by the late Member for the University of Oxford, previous to the prorogation of Parliament, show that the produce of the post-horse duties in England and Wales amounted, in 1846, to 172,621*l.*, and in 1845 to 169,873*l.* The gross receipts on post-horses in the London district during the half-year ending January 5, 1847, amounted to 7705*l.* The receipts on the line of the North-Western railroad, during the same period, amounted to 4967*l.*, exhibiting a falling off, as compared with the preceding half-year, of 165*l.* The gross receipts during the same period in the eastern part of England, amounted to 5137*l.*; in the south-eastern, to 3834*l.*; in the western, to 5199*l.*; on the line of the Great Western railroad, to 10,179*l.*; on the South-Western railroad, to 8222*l.*; on the South-Eastern, to 7299*l.*, and on the Eastern Counties line of railroad, to 8168*l.*

THE SMOKE NUISANCE—MEETING AT LIVERPOOL.—On Monday last, a meeting of the principal manufacturers, boiler-makers, engine-makers, &c., was held, at the Clarendon-rooms, to take into consideration the best steps to be adopted, in order to comply with the requirements of the new Sanatory Act as far as possible; and also to impress upon the council, and the local authorities, the fact that, with the apparatus which is now in use, it is impossible fully to comply with that Act by the total consumption of the smoke at their several places of business. Mr. M'GREGOR presided, and several gentlemen gave accounts of the various efforts which they had respectively made to consume their smoke, and thereby abate the nuisance, without being successful in doing so. They seemed to be all of opinion, that Williams's new smoke consuming apparatus was not adequate to the purposes for which it was intended; and most of them stated that they believed the system recommended by Mr. Grantham to be but little better. The objections raised against the apparatus were—the hot-air principle ruined the boilers, by the operation of the expansive and contractive qualities of the iron of which they are composed, under the influence of such an amount of heat; the cold-air principle destroyed the bars in consequence of its spoiling the draft in the flue; with either, steam could not be raised in sufficient quantities to work the engines; in foggy weather they had no draft at all with it, and therefore no steam; the smoke could not be consumed by it until after the fire had been kindled, and therefore they were still liable under the Act—more than half of it never was consumed by the apparatus; and, lastly, that it took at least 18 per cent. more coal to keep up a fire where it was used. These objections having been put, a series of resolutions were proposed and adopted, by which the meeting pledged themselves to use every effort to comply with the Act; but, after doing so, they protested against the vague wording of the 126th clause of the Act, which did not assign any limit to what was considered the adoption of "the best practical means" in their power to abolish the nuisance. A committee was appointed to collect evidence on the subject, and wait upon the Town Council, with a view of ascertaining whether the Council will be inclined to press the penalty upon them.—*Gore's Adv.*

FALL OF A BRIDGE IN FRANCE.—A few days ago the new bridge of Fayeyrolles, in the commune of Vallerangue (Gard), fell at the moment the keystone was being fixed, and carried with it eight men, who were employed in the operation. One of them died within an hour, but the rest escaped with only contusions, some of which, however, are very severe. The accident is said to have arisen from some fault in the construction of the framework of the centre, which gave way before the arch was closed.—*Galignani.*

COLLEGE OF MINES IN FRANCE.—The law authorising the purchase of the estate of Chante Grillet, near St. Etienne, as a school of mines, has been decreed by a Royal ordinance; such an institution will be most beneficially felt in that great coal mining district. The forced sale of the concession of the coal mines of Villars, near St. Etienne, is announced to take place on the 18th inst., by the public crier of the Civil Tribunal of St. Etienne. The put up price is 6000*l.*

REED'S PATENT RAILWAY CHAIRS AND RAILS.—We have in various former numbers alluded to this invention, so well calculated to prevent those alarming accidents which so often happen from the curling up of the ends of the rails, and the consequent throwing the trains off the line. The great object is to give the whole length of rails a more continuous, firm, and equal bearing; the diagrams, which will be found in our advertising columns, gives to the sleeper-chair 10 inches, and the block-chair 22 inches, support. On each side of the chair are square or oblong holes, to receive a pin or bolt, placed on the under part of the rail, to prevent them, when secured, from drawing asunder at their points of junction; or the blocks may be cast on the upper surface of the chair, and a corresponding notch cut on the under part of the rail, to receive the bolt, which may be used or not, as required. For curves, a metal sleeper is projected, with chairs cast at either end, having a bearing of 30 in. These connected chairs, laid transversely on the railway, will preserve the gauge from variation, and prevent the displacement by the outer pressure of the train. By the adoption of iron, instead of wood and stone, a superior degree of solidity and permanency is given to the railway; and it is next to impossible that any rail can either draw asunder, or spring up, from the chair. If some such improvement is not adopted, and accidents still continue, it will be high time for Government to interfere, and pass some stringent laws for the protection of the public. If it is argued that the cost would be too exorbitant, it may be replied, that the saving in wear and tear, and relaying rails, would more than counterbalance the first extra cost; while the safety secured to the public, and the ease, and absence of oscillation in travelling, would still add to the advantages, and render their adoption general.

THE ELECTRIC TELEGRAPH.—Messrs. Brett and Little, of Furnival's Inn, having now completed their arrangements, and secured their patents for the Electric Telegraphic Converser, are prepared to exhibit the same, and to demonstrate its advantages. We shall avail ourselves, in a day or two, of the opportunity of a complete inspection, and give full particulars in our next number.

NEW ROTARY ENGINE.—Mr. T. Onion, of Calais, has obtained a patent for a new rotary engine, of that kind where the steam impinges on projecting pistons, causing them to revolve in the cylinder. In this engine the body is a plain cylindrical case, truly bored on its inside surface. At the bottom of this cylinder is a projection, reaching the whole depth of the cylinder, and termed a divisional abutment, fitted with a shifting packing piece, and a spring to keep it forced steam-tight against the inner cylinder, and on each side of which the induction and eduction valves are placed. The main shaft works in a stuffing-box, and on this shaft is fixed the internal cylinder being pressed upon by the shifting piece in the divisional abutment. There is a groove completely across this cylinder, in which work two pistons, in such manner that when projecting out they work steam-tight against the inner face of the outer cylinder, the steam from the injection valve impinging upon them; but, on reaching the divisional abutment, which they could not otherwise pass, small friction wheels attached to each, pass over heart-shaped cams fixed in the plates of the outer case, and thus lift the pistons alternately over the abutments; this engine is reversed in the usual way of transforming the induction valve into the eduction, and *vice versâ*.

IMPROVEMENTS IN BORING FOR WELLS, &C.—A patent has been secured by Mr. Taylor, of Furnival's Inn, for an improved apparatus for boring. It consists in so constructing the borer, or chisel, that the clippings or particles of earth may escape into a receiver immediately above it, and which is made of sufficient length to contain the particles of earth resulting from one day's operation, or about 12 ft. The opening in the borer is just below the shoulder, which ascends through it into the receiver above; and the particles of earth are prevented returning by a clack valve. To prevent the concussion, generally so injurious to the tools, he connects this receiver to the upper rods by a slotted or sliding joint in such manner, that much lighter upper rods can be used, even strong wire answering.

DISCOVERY OF AN ANTHRACITE MINE IN FRANCE.—It appears, that while exploring the department of the Lower Pyrennees, the mining engineer made the important discovery at Yurançon, of an extensive deposit of a sort of anthracite; it is of a lignaceous and carbonic matter, mixed with small portions of charcoal, but quite compact, and deeply imbedded, so as to render it difficult to extract; the carbonised portion, when ignited, emits a strong bituminous odour. This discovery is expected to lead to valuable mines of anthracite, in both the departments of the Upper and Lower Pyrennees, on the frontiers of Spain, hitherto considered quite barren of such mineral.

RAILWAY TIME TABLES.—An engineer of Paris, named Ybry, has taken out a patent for the construction of a time table in such manner, that, by its means, the time necessary for the successive trains to perform the different parts of the journey, can be so regulated as to avoid each other; and the time of extraordinary, or express, trains can be quickly laid down, so as not to interfere with the progress of the other trains. It will show at a glance the working of the different trains, giving immediately without calculation the time at which each train arrives at, and departs from, the various stations; the time at which it should be at any part of the journey, and the time that each train stops at each station. A parallelogram is drawn on a sheet of paper, with perpendicular lines, which represent the length of the line, and vertical lines representing time. Knowing the time a train starts, and the time it should arrive at its journey's end, and going an uniform pace, it is only to lay a **T** square from one hour in the top line to the arrival hour in the other, and the intermediate times and stations will be all seen at a glance.

ELECTRICITY IN LEATHER BANDS.—In *Dr. Silliman's American Journal* there is a notice on the above subject, showing a property in leather which we think it is not generally known to possess. In examining the leather bands of a cotton mill, on the sea-coast of the State of Maine, they were found to be highly excited. There are several hundred bands in the mill, and those which turn upon wooden drums or pulleys, whereby they are partially insulated, become highly charged. One fixed upon for making most of the experiments was 35 feet long, 9 inches wide, moving 1600 feet per minute, passing round two wooden drums, which revolve upon an iron shaft 180 times per minute; and in clear weather an electric spark may be taken on the knuckle held below the band at 17 in. distance; on presenting the end of the finger, the striking distance is 3 feet; the point of a black-pencil shows a distinct brush 4 feet from the band, and a steel point becomes luminous at 7 feet. When the bands are in this condition, the first processes of the cotton manufacture are attended with serious inconvenience; the fine filaments of the cotton repel each other, causing a deal of waste, and, in several instances, the whole "drawing," as it is termed, has been lifted from the machine to a band 4 feet above it. These difficulties have now been partially removed, by extending a conductor of wire to an iron steam pipe which passes through the rooms, and by emitting jets of steam near those bands that are most highly charged. By presenting a piece of leather 2 ft. long, with one edge slightly curved, to the band, a succession of brilliant flashes and jets is immediately produced, giving a very perfect imitation of the aurora light. Other beautiful experiments were entered into, showing the favourable nature of the climate for the development of electricity, which, probably, at no season could be observed in this country.

VELOCITY OF ELECTRICITY.—A copper wire, 1-15th of an inch in diameter, and half a mile long, insulated in such a manner that its parts are not in contact with each other, three breaks being made in it; one near the beginning, another near the end, and the third near the middle of the length. These breaks are then brought near each other, and arranged in a vertical line, before a small mirror, which can be made to revolve by means of watchwork, at the rate of 800 times in a second. When the mirror is at rest, the sparks appear one over the other; when in motion, the reflection of the three sparks from the three lines of light in the mirror, indicate that the duration of the discharge occupied an appreciable portion of time. The spark at the beginning of the wire was vertically over that at the ending, whilst the spark at the middle was thrown a little to one side, which proves that the disturbance of the electrical equilibrium takes place last at the middle of the wire. By measuring this deviation, and comparing it with the motion of the mirror, Professor Wheatstone found the velocity of the discharge was about 281,000 miles per second, or greater than that of light through the celestial spaces.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Aug. 7, was 16,576; amount of money, £69 1s. 6d.

Original Correspondence.

THE LEAD TRADE.

SIR,—Fallacies may be repeated so often, that not only the ignorant may adopt them as truths, but the very promulgators themselves believe them to be facts; and hence statements, which those who are acquainted with the circumstances know to be unfounded, and too silly to merit notice, by the pertinacity with which they are repeated, call for contradiction. Amongst such fallacies are your late statements respecting the mode of selling lead ore at Holywell, and your observations on the relative price of lead ore and of lead; and, as you deemed it necessary to give a very prominent place to those assertions, you will only be doing an act of justice by giving one equally so to this refutation of them. You speak of the immemorial practice of selling lead ore at Holywell by private contract, and of the enormous advantages which the lead smelters obtain under the present "hole-and-corner system." Now, I take leave to tell you, Sir, that you have been misinformed, as to the manner of selling ores in this district. For the last 20 years, at least, it has been the general rule and constant practice to sell the lead ores raised in this district, and those sent here from other districts, by public ticket, for which purpose there are two fixed sales in each month—viz.: the second Thursday, and the Thursday preceding the last Saturday in each month—with such intermediate sales as the quantity of ores imported from other districts require, and which sales the sellers, or their agents, fix to suit their own convenience. These sales are conducted in the main in a similar manner to the ticketings for copper ore in Cornwall, and where they differ therefrom it is because the sellers think the Holywell plan affords additional security for their obtaining the full value for their ores. For the truth of this I refer you to Mr. John Taylor, London, who is, probably, the largest seller of lead ores in the kingdom.

With respect to your next assertion, that a fall in the price of "*some*" ores, equal to 20 per cent., has taken place, while there has been no corresponding fall in the price of lead, or silver, I beg to say, that there has been no such fall as 20 per cent. on *any* ores, though there, doubtless, was a considerable fall during the monetary crisis two or three months ago; and well there might be, when the smelters found *sterling silver unsaleable*. Happily, for all, this state of things did not last long, and ores have pretty nearly recovered their former price; but, whatever depression existed in the price of lead ore, it existed equally in the vaunted ticketings of Cornwall, as in those of this district, as you will find, if the shareholders in East Wheal Rose, East Tamar, Callington, and other mines, will respond truly to your inquiries. Whether lead smelting in this kingdom is too profitable a business, or (which is nearer to the truth) not so profitable as it ought to be, is a question which cannot be discussed here; but I can fearlessly assert, that in no district in this kingdom is so great a price given for lead ore, in proportion to the absolute value of its marketable produce, as in this vilified district of Holywell, where the ore is sold 20 cwt. *to the ton, wet as it lies on the floors of the mines, without the least allowance for water*—whereas, in other districts, the smelter gets 21 cwt. *to the ton, and dry weight*.—A FLINTSHIRE LEAD SMELTER: *August* 10.

[We readily give insertion to our correspondent's communication, and feel obliged, as we always shall be, for information on the subject of the lead trade, which has ever been kept so close, that we have been dependent upon the kindness of correspondents for such particulars as we have from time to time published. If for the past 20 years, as stated by our correspondent, lead ores *have* been sold by ticketing, they have not, to the best of our knowledge, been on the open public system, adopted with relation to copper ore in Cornwall. We have uniformly found it the greatest difficulty to obtain returns of prices; and it is only within a few months that we have been able to lay before our readers returns on which we could rely. We again state, that we shall most willingly insert communications from correspondents on the subject.]

EMPLOYMENT OF FEMALES IN COLLIERIES.

SIR,—It is a fact generally known, that a bill was brought into Parliament by Lord Ashley, and passed some time ago, for the prohibition of the employment of females in mines, &c.; and I believe, shortly after the Act was passed, coalowners generally, who had previously employed females, abandoned the practice. It appears, however, that the Government Commissioner (Mr. Seymour Tremenheere), in making inquiries into the state of the coal trade, lately ascertained that many coalowners in Lancashire still employed a number of females underground, which fact he names in his report. I happened very lately to visit some collieries in the neighbourhood of Billinge and Bispham, near Wigan; and to my astonishment saw several females come up the pits—and, after making inquiry, I ascertained that many of the coalowners in that district daringly adhere to the practice, for the simple reason, that women can be had for lower wages than men; and, by so doing, they can bring their coals cheaper to market than their upright neighbours, who, from principle, deny themselves of anything that is not sanctioned by the laws of their country. Now, Sir, you will perceive that this illicit and demoralising practice is as injurious to the well-disposed coalowner as the sale of any smuggled goods is to the honest tradesman, and it seems strange the authorities do not interfere with it; however, I hope the Government Inspector will not allow it to pass as the local authorities have heretofore done.

Aug. 9. A CONSTANT READER.

ON THE MORE GENERAL USE OF GAS IN PRIVATE HOUSES.

SIR,—Having just published a small pamphlet, with the view to induce a more general use of gas in private houses, in which the directors of this company not only announce their intention of supplying to their customers, *on a rental*, the necessary fittings, but also make a considerable reduction in the price of gas, from 6s. to 5s. per 1000 cubic feet, and accompanying the reduction by a new method of charging for the gas—viz.: by the 100, instead of by the 1000 cubic feet, as heretofore.

It has often been a matter of considerable surprise to me, that this mode of charging for gas has not been before resorted to, seeing its greater simplicity and convenience, rendering thereby the accounts much more easy to be kept, and facilitating the *reading* and better *understanding* the METER by the consumer. The meters, too, are generally made to indicate hundreds or "cents" on the dial-plate; and consequently where, as in this town, the gas is sold by the 100, it requires only to notice how many hundreds have been consumed to know exactly how many *sixpences* have to be paid—thus, for example, the first or right-hand dial on the meter indicates 1, 2, 3, 4, &c., *hundreds* or *sixpences*; the second, or middle dial, indicates *tens* or tens of hundreds, or tens of sixpences (5s.); the third hand indicates hundreds, or hundreds of hundreds (for simplicity they are called by their Latin name, "cents.") Now, every cent, or 100, being 6d., every one of these hundreds of cents will be 50s.—and so on, if there be any more dials, which there are on larger meters. The system of charging gas by so high a quantity as 1000 *cubic feet*, has always appeared to me so extraordinary and inexplicable, that I have devoted some little pains to discover how it arose; and I have ascertained that the scientific and talented inventor of the meter did himself foresee the inapplicability of charging gas *by this high medium*, because he divided the dials of his indices into "cents," or hundreds—always, as I infer, contemplating charging by the *hundred cubic feet*, AND NOT by the 1000 *cubic feet*. How gas ever came to be charged by the 1000 cubic feet, may be gathered from the following interesting, but now obsolete, facts:—On the early introduction of gas lighting, gasholders or *gasometers*, as they were then called, were as now used, but of a very different capacity from those of the present day; they were then cubes of *ten feet*, designed to hold 1000 cubic feet of gas *each*; and it was with these vessels, of which TEN were necessary for the lighting of *one factory*, that experiments were made; and it was ascertained that the contents of one of them would last as long, and be equivalent to a given quantity of candles or oil, and hence the price was fixed by the 1000 cubic feet—a quantity only commensurate with such establishments, where upwards of 1000 jet burners, equal to 2500 candles, were used at one time. The subsequent practice, too, of charging gas *by the year*, or, as it has been termed, by scale, rendered it necessary to calculate the whole quantity of gas that would be consumed in the year by any given burner; and hence the quantity being ascertained, the price per 1000 cubic feet was nominally kept up, although the annual charge was afterwards subdivided into smaller parts, and collected quarterly or monthly; but all this was before the meter became established, and which has entirely superseded the necessity of these calculations and arrangements, and substituted in their stead a system by which gas companies and consumers can *understand* and *know* the precise quantity consumed—thus rendering gas lighting what it is so well calculated to be, alike subservient to the wants, the comforts, and the economy of all.

I have thus attempted to show how the system of charging by the *larger*, instead of the *lesser*, quantity arose, and pointed out what I consider to be the preferable method: I will add, that I am satisfied it will be found in practice to possess many advantages—one of which will be the showing, more perceptibly to the consumer, the superiority of gas, in point of economy, over oil or candles, as it will readily be perceived, by referring to the table in the pamphlet (p. 9), that as the cost of 100 cubic feet of gas is 6d., and 100 feet of gas is equal in illuminating power to 5 lbs. of candles, which, at 8d. per lb., would cost 3s. 4d., it follows that gas is to candles as a measure of economy in that ratio, or as 6d. is to 3s. 4d., or 6⅔rds to one. I hope that the attention of gas companies, their engineers and managers, will be drawn to this subject. T. A. HEDLEY, Engineer.

Devonport Gas-Works, Aug. 10.

GUN-COTTON.

SIR,—I should very much doubt whether the sulphate of alumina, as proposed by Mr. De la Haye, would render gun-cotton less dangerous in manufacture; I believe its manufacture will ever prove a perilous enterprise. The causes connected with its explosive phenomena are wrapt in inextricable mystery; and it has exploded with me under such singular, and eccentric circumstances, that I am inclined to believe there are few substances more subtile and dangerous to deal with, or more liable to incidental and spontaneous explosion—circumstances, indeed, over which, with all our cunning, we have, as yet, no power or control whatever. Among these causes may be cited the sudden extrication of temperature, friction, electric influence, unequal application of heat, sudden compression, and percussion. I believe there are circumstances, wherein it will explode at temperatures little elevated above 100° Fah., if not, indeed, minus that point; even in a slightly-compressed state, in a humid atmosphere, it is especially susceptible of spontaneous combustion—the example of this kind, which occurred with Messrs. Hall, prior to the recent terrible catastrophe, should have operated as a beacon. I allude to the spontaneous explosion of the barrel of gun-cotton buried in the earth, and surrounded with fermenting materials. I think an interesting inquiry arises out of the circumstances of the patent—namely, whether the gun-cotton, as prepared *previous* to the *denouement* of the patent—viz., *without sulphuric acid*—i. e. with nitric acid merely—would not be *safer* than with the superaddition of the sulphuric acid, as proposed by M. Schönbein; I confess I think it would. The grounds of its rejection by the Board of Ordnance are precisely those on which I maintained its danger, when employed by the sportsman, and used in ordinary fire-arms; and I am more and more convinced I only did my duty, in pointing out to the Post-office authorities the danger of its transmission by post. I have no hesitation to say, that I feel convinced it is the duty of Government to impose an interdict on the manufacture of such a fearful and formidable material, compassed as it is with elements of danger so intractable and subtile. It is true gunpowder is sufficiently dangerous, but, then, it is a *tangible* material, and there are provisions for safety, with the apparatus of security. The manufacture of gun-cotton is, I believe, and think, also, very properly, proscribed in Prussia. I cannot doubt that the patent right should be forthwith cancelled—the manufacture of gun-cotton abrogated—and it seems only just and right, that Messrs. Hall should be screened against any legal claim on the part of Schönbein, and be remunerated for their outlays and losses, because Government, by its patent, sanctioned the manufacture. That gun-cotton is infinitely superior to gunpowder for blasting rocks there can be no doubt; but the claims of humanity must not be sacrificed at the shrine of the interests of the quarry. J. MURRAY.

Portland-place, Hull, Aug. 10.

SUB-MARINE TELEGRAPHS.

RESPECTED FRIEND,—In a former Number of the *Mining Journal*, Dr. Murray, in alluding to the construction of bridges, recommends that they should be constructed of iron rods twisted together as ropes, and then welded together. Now, the greatest objection I have heard against submarine telegraphs of a great length is, that the wires might break in the centre; but it is probable that, if they were composed of several copper wires twisted together, as Dr. Murray suggests, they would never break—so that there would be no danger in laying a wire across the Atlantic from the west of Ireland to Nova Scotia—the wire being enclosed in an India-rubber pipe. That this can be done, there can be no doubt; and the expense cannot be so great as to render that an insurmountable obstacle. This wonderful present of science to man ought surely to be accepted; but it seems that the world is very slow in availing itself of the advantages it presents. The laying of the wires in the Channel, from Dover to Calais, or Boulogne, seems to be thrown aside for the present, after experiments have proved that it would succeed. Can it be that the affair has been placed in the hands of the "eminent engineers?"

Liverpool, 8mo. 10. JOHN DE LA HAYE.

THE BRITANNIA TUNNEL BRIDGE.

SIR,—I have noticed a great deal of controversy, in your valuable paper and other publications, respecting the Britannia Tunnel Bridge. Now, Sir, from what I am able to judge, the parties who raise these objections are either directly or indirectly interested in projects of their own for similar purposes; and, therefore, their objections have not been raised in any way regarding public safety, but with the view of introducing their own projects. First, Mr. John De la Haye accuses Mr. Robert Stephenson of having "fished *his* project out of the water," and suspending it in the air in the shape of a suspension tunnel; now, although Mr. De la Haye may have projected the submarine railway he so much speaks of, has he, in any one instance, ever proposed to employ it in its present position? Mr. De la Haye's project is merely to lay an iron tube or tunnel at the bottom of the sea, in an horizontal position, subjected to little or no strain more than that of the external pressure of the water; but Mr. Stephenson at once proposes to suspend the tunnel in the air, and to carry railway trains without the least support. I must candidly confess, that I consider all the credit is due to Mr. Stephenson for the present invention, and every impartial person will consider it so; and I might venture further to say, that Mr. De la Haye would never have had courage enough to propose his matured tunnel for its present intended position—and whatever might be his claim to submarine railway purposes, Mr. Stephenson would not, I am certain, dispute; but, in the present invention, I consider that Mr. De la Haye has no more claim than the man in the moon.

The second is Mr. Motley, who has invented a machine for the purpose of testing the strength of the tunnel—this machine may be ingenious enough, but that gentleman's calculations are altogether based on supposition; and, from his own statement, he has no knowledge whatever of the strength of the materials, or even the dimensions of the tunnel—its form or construction—therefore, his opinions cannot carry weight. Mr. Motley, consequently, having a project he wishes to introduce, it is natural to suppose, that he disapproves of every other principle but his own; and the longer Mr. Robert Stephenson keeps the dimensions of his project a secret, the more his opponents will be puzzled, and doomed to suffer mortification; only let us wait until it is finished, and properly tested, and then we can examine its merits or demerits.

The third person is Gen. Pasley, from whose statement, we must suppose, that he is offended, either because he has not been consulted by Mr. Stephenson, or that Mr. S. has not adopted the plans suggested by him—namely: the vertical trusses—but Gen. Pasley has in no way disapproved of Mr. Stephenson's principle; on the contrary, in his letter, in your last Journal, he states, that "he considers Mr. Robert Stephenson's second plan (which is the tunnel), to be a novel and very ingenious construction;" and, when examined by the committee of the House of Commons, gives the following opinion, "that the tubular bridge, proposed by Mr. Stephenson, will be strong and safe, when properly fixed, and would not be injured by the gales of wind." In another paragraph he states, that "he feels it his duty to express his entire dissent from this rash, if not impracticable, plan of operation, which cannot be attempted without risk of some very serious disaster, except at high water, slack of a neap tide, and in a perfect calm." All persons by this time must be aware, that the tunnel is 116 ft. above the surface of the water—what effect can the tide possibly have upon the tunnel at that height? The storms, perhaps, may have some trifling effect upon the structure; but it must be a tremendous storm to put a tube of 1200 tons weight in motion. These observations appear most unreasonable and crude—and, if the general makes such confused statements as these, from time to time, how are we to place confidence in his assertions? Again, he accuses Mr. Stephenson of waiving in his plans; but it is plain that the general has waived in his opinion; and the whole of his statements fully comfirm that he is, to say the least, ignorant of Mr. Stephenson's plans. I certainly consider it would have been more to the general's credit, to have made himself more fully acquainted with the subject than to have hazarded statements such as those referred to.

The fourth objector is a writer, signing himself "Mathematician," and who appears highly delighted that the Government Inspector has broken silence. Now, this theorist must have a very limited knowledge of the properties of iron, to make such absurd statements as those contained in his communication in your last Journal. Perhaps, he will have no objection to state the length of time and strain required to convert wrought iron into cast-iron. According to this law, cast-iron must be again reduced into brittle ore, or some other unknown substance. This certainly is a new theory; I am not aware that any of the locomotive engine-boiler plates, after being subjected to a continual strain for several years, have ever exhibited this wonderful phenomena, or yet the rivets or bolts in any way getting loosened. I once saw a locomotive engine-boiler after an explosion, which I examined most minutely; but, to my great astonishment, I found that not one single rivet had given way, or yet any part where the plates had been jointed by rivets; this fully convinced me that the joints are infinitely stronger than the neat plates. How, then, can a professed "Mathematician" make such alarming statements, which are merely founded on theory and supposition?

Perhaps your correspondent has in his possession some iron that has undergone this chemical change; if so, I hope he will forward a specimen to the *Mining Journal* office, that we may be convinced of what he has stated, on inspection. In conclusion, can any practical person suppose that Mr. R. Stephenson is possessed of so little knowledge, or that he has so little regard for his own reputation, as to introduce anything that he has not practically and experimentally tested; or can it be supposed that he would be so treacherous as to risk, for mere curiosity sake, the lives of his fellow-creatures on any invention in any way hazardous. I would advise those gentlemen who have projects to bring forward, to get honestly into public favour, then they might obtain a chance of introducing their inventions; but, by opposing practical men, of superior talent to themselves, with practicable inventions, they must be taught to expect, what they will ever meet, a retaliation.—CIVIL ENGINEER: *London, Aug.* 10.

THE BRITANNIA TUNNEL BRIDGE.

RESPECTED FRIEND,—The observations of General Pasley have led to numerous remarks on the safety of the Menai Tunnel; and the opinion seems to gain ground, that its capability of supporting heavy weights is no index of itself, that it would bear the strains produced by the rapid transit of the trains; but it should be recollected, that the injurious effects of concussion is not confined to iron tunnels alone; and if means can be adopted to obviate this inconvenience on other bridges of large span, provided they are sufficiently strong to bear a considerable amount of weight, it may not be impossible to adopt the same plan in iron tunnels: the question is, whether the eminent engineers will condescend to examine the necessity of consulting the convenience and safety of the public. If this is done, I would not hesitate to predict that the Menai Tunnel can be rendered as safe as any bridge in the country. I might, in fact, refer to precedents to prove it—thus the *Great Britain* steamer is 322 feet in length, and a considerable space is occupied at each end for saloons, &c.—so that the boilers, engines, coals, and a great part of the cargo are in the centre of the vessel; the weight of engines, 1000-horse power, must be immense—in fact, many times the weight of the heaviest railway train. It may, however, be observed, that there is sufficient difference between the two cases, to prevent an exact comparison—firstly, the engines are stationary in the vessel—consequently, there is but little vibration caused by their working; and, secondly, the whole of the vessel is generally supported by the water. As regards the first of these objections, I believe that the effects of concussion produced by the velocity of the trains can be obviated by means of a platform of timber and India-rubber, or any other flexible substance; and as regards the second, it may be asserted that a large vessel, which would not be sufficiently strong to bear the weight of its engines and boilers, independently of the support of the water in the centre, would not be safe for crossing the Atlantic. It is well known, that when the sea runs high, the water separates so rapidly, that the vessel is frequently suspended at each end on two waves—I once noticed this during a gale, in crossing the Channel in the Government steamer *Wildfire*—on looking over the side of the vessel, the depth to which the water descended in the centre was so great, that I was surprised no greater strain was perceptible; the paddles would whirl in the air, causing the engines to work as rapidly as those of a locomotive at a high speed.

It is true that the weight of the engines was thus thrown in the centre of the vessel only during a few seconds; yet the weight must have been exerted so suddenly, that it may be inferred, if it had not been constructed sufficiently strong to bear the weight of the engines, independently of the support of the water, it would have been injured in crossing over a stormy ocean. This was probably the cause of the loss of the *President* steamer, and other vessels; but iron steamers of great length have been since built, and it does not appear that they have been injured by the weight of their engines. This may, at least, go far to prove the possibility of constructing a tunnel in such a manner as to prevent any injurious results by the weight of the train passing through.

In my original papers, on the construction of iron tunnels, I proposed to construct the divisions near the sea-shore, and then to float them, in order to tow them to the required spot; but I did not expect that G. S. would have followed my plan in these details for the Menai Tunnel. It is curious, that he should build the tube in the same form as I had originally proposed, to use the same materials, and by the same means—riveting—and also to construct it on the same spot. This may go far to prove that it is my invention; but any engineer will see that there is no necessity for constructing it above 100 ft. below the required spot, and then to raise it that immense height. I will beg to suggest a mode free from danger, or, at least, comparatively so, and considerably less expensive. I would construct the divisions on the railway on each side of the Straits on a timber platform, rolling on wheels over the rails; I would then construct a bridge of boats 100 ft. wide, and nearly of the same length as the divisions, but capable of being floated between the piers. Over this bridge, or platform, I would construct a scaffolding, 100 ft. in height, but considerably narrower at the top, and on this a platform, with rails the same gauge as on the railway. I would also construct a temporary timber bridge, or platform, between the piers and the shore, the tide being sufficiently high, and the floating bridge secured in its position; the tube would be drawn over the upper platform by means of chains passing over wheels, placed on top of the centre pier; the division would glide on the rails as easily as a railway train, and a few minutes only would be required to effect this. Of course, it is possible to raise the tubes by means of hydraulic presses, however dangerous it may be; but the expense will be no trifle—it will be, in fact, a question of pounds, shillings, and pence. I suppose the weight of each division will be nearly as much as the *Great Britain*, without her machinery—*en passant*, is it not a pity that the task of raising that vessel has not been entrusted to G. S.?—his hydraulic presses would have raised her a dozen feet easily enough, and most likely the cost would not have exceeded 30,000*l*. General Pasley supposes that G. S. had originally proposed to construct the tube of the *elliptical* form; but that, in consequence of the experiments of Fairbairn and Hodgkinson, he had abandoned the elliptical for the rectangular; while, according to another version of the affair, he had originally proposed the rectangular tube, which the results of the experiments of Fairbairn and Hodgkinson published at length, confirmed to be the strongest; and then, that since that period, Prof. Hodgkinson had suddenly come to the conclusion, that the cylindrical tube was infinitely stronger, but it would seem that the general knows nothing of the last assertion!—yet one would suppose that he should have received some communication on the subject before any one else—so that a joke has been evidently played on the inspector-general.

Liverpool, 8 mo. 10. JOHN DE LA HAYE.

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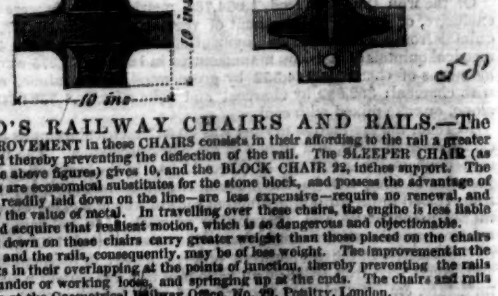

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Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY.....Shipowners' Towing Company—offices, at Twelve for One.
TUESDAY.....Kirkcudbrightshire Mining Company—offices.
Cork and Waterford Railway—London Tavern, at One.
London and Blackwall Railway—London Tavern, at Twelve.
WEDNESDAY..Kilkenny and Great Southern and Western Railway—British Hotel, at Twelve for One.
Currency Creek Special Survey—London Tavern, at One.
Combe Martin and North Devon Mining Company—at the mine, at Twelve.
THURSDAY,....Southampton Docks Company—offices, at One.
Southampton and Dorchester Railway—Vauxhall Terminus, ½ past Three.
Universal Salvage Company—offices, at Two.
FRIDAY.....Wheal Curtis Mining Company—Guildhall Coffee-house, at One.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

CHESTER AND HOLYHEAD RAILWAY.

The seventh half-yearly general meeting of shareholders was held on Wednesday last, the 11th inst., at the offices, Moorgate-street.

H. THOMAS, Esq., in the chair.

The SECRETARY (Mr. George King) having read the directors' report, proceeded with the following, from Mr. Robert Stephenson, M.P., on the state and progress of the works:—

I herewith enclose the very satisfactory reports I have received from Mr. Ross and Mr. Forster, on the state of the contract works on the line, which have also lately undergone my personal inspection as far as Bangor.

Between Chester and Conway, a distance of 48 miles, full 40 miles of permanent road are completed. The only points in this distance where the unfinished works require attention are the following:—1. The Flint Marsh embankment, the masonry and permanent way connected with which, will require to the end of September to finish.—2. The masonry and embankment at Mostyn, where a considerable amount of work remains yet undone; but with the exertions now making it will, I have no doubt, be completed by nearly the same time.—3. The embankment and draw bridge over the Voryd near Rhyll, which are being proceeded with satisfactorily. The former is in a very advanced state, and of the latter only one abutment remains incomplete, which I have no reason to doubt will be ready for the ironwork within three weeks from the present time. One portion of the ironwork is now in the course of erection, and the remainder nearly all delivered. The completion of the work may, I think, be effected by the middle, or towards the end, of October.—4. In the Penmaen Rhos cutting, there now remains only 22,000 cubic yards to remove, which will be accomplished by the middle of September.—5. The masonry of the Conway is advancing as fast as is expedient until the tube is ready, which is progressing very satisfactorily. In the commencement of this part of the work, we experienced several delays, some arising out of the peculiarity of the work, others from the non-delivery of the large plates, which, being of unusual size, required the construction of new machinery for their manufacture. The whole is now advancing rapidly: the plans for moving and raising the tubes are completed; the hydraulic presses and chains are in progress, and will be ready in time; two of the pontoons are complete, and the others in a forward state. One of the tubes on the platform at Conway is approaching completion; the whole of the bottom, and a considerable part of the sides are finished; part of the top in its place, a great portion of the remainder is finished and fitted, and in a few days a complete section of the middle portion of the tube will be entirely constructed. I am happy to say, that as we proceed in this part of the work, it manifests all the strength and rigidity which was anticipated. Every exertion has been made to forward this bridge. Mr. Evans, the contractor, still expects to complete the tube by the middle of September; I do not, however, imagine that this will be possible; but, contingent on a sufficient supply of iron, I have no doubt it may be ready for the passage of trains in the month of November next.

With reference to the accident at the Dee Bridge, I beg to observe, that further investigation has left the facts, to the best of my knowledge, precisely in the same state as when I reported specially on that subject, in June last. We propose to reinstate the broken girder, and to add trussed wooden supports under the existing ironwork. This method of giving additional strength to the bridge is adopted to meet the excitement thereon in the vicinity of Chester, rather than from a conviction that it is the best, or that the principle of construction is in any way incorrect; on this part of the subject, I forbear to make any detailed statement at present, as the matter is undergoing full investigation, and is about to become the subject of consideration before a commission appointed by Government, for the purpose of instituting an experimental investigation on cast-iron bridges generally.

Between Conway and Bangor a very large proportion of the permanent road is laid, and the following are the only works now requiring close attention.—1. Sea walls at Penmaen Mawr, which are completed up to formation level on the east side of the tunnel. The damaged portion of the wall, westward of the tunnel, is being replaced by a viaduct of 13 openings, occupying a length of 550 ft. The masonry of this viaduct is of the strongest description, and is proceeding very rapidly; one-third of the whole is already set, and from the daily advances now making, we may confidently reckon on its completion early in September. The remainder of the sea wall is completed to formation level, with the exception of a small portion near the western entrance to the tunnel, which is now, however, advancing in a satisfactory manner. The tunnel itself is completed throughout, with the exception of a few feet at the east end, which requires widening to receive the masonry of the front. The rock throughout the tunnel, although of the hardest description, has proved so full of fissures, that it has been found necessary to line it with masonry for about half its whole length.—2. The Ogwen and Cegyn viaducts—the former is nearly finished, 16 of the 22 arches being completed—the latter is far advanced, and will certainly be finished by the end of October.—3. Llandegai tunnel—the length is 506 yards, of which 472 are finished, and the whole may be completed by the beginning of October.—4. Bangor tunnel—the length is 920 yards, of which 751 are completed. This work is more backward than any other between Chester and Bangor, and will require the greatest possible exertion on the part of the contractor to finish it before the end of October; at present a large force of men are employed, and with constant vigilance I hope the completion may be accomplished by that time.

The state of the contracts throughout Anglesea are very satisfactory, and as all the works are of an ordinary character, I anticipate no difficulty in their being completed by the end of January next, should the winter season not prove unusually severe.

The Britannia Bridge is in active progress, the pier on the Britannia Rock is the most backward; but great exertions are being made to recover the delay which has taken place, owing to the difficulty of obtaining stone of the requisite quality and size. The quantity of stone which has been set during the past-half year, is as follows:—Carnarvon abutment, 71,000 cubic feet: Carnarvon pier, 36,500; Britannia Rock, 27,000; Anglesea pier, 48,000; Anglesea abutment, 126,000—308,500 cubic feet. The daily quantity set, therefore, has not much exceeded 2000 ft., whereas 3000 ft. is the rate required to finish this contract by the end of March, 1848. The rate during the last month has been 2535 feet per day, and I have no doubt that this will be increased, provided the supply of stone from the quarries can be increased, which is the chief and almost the only contingency we have to provide for; the contractors' apparatus and means for setting being fully equal to the stipulated rate. The ironwork for this bridge is now progressing, and will certainly be ready for erection by the time the masonry is sufficiently advanced to receive it. Two platforms for the construction of the tubes are completed, and occupied; a third is nearly finished; the workshops and 20 cottages for the men are finished; a large quantity of the plates are fitted, and one rivetting machine is at work.

The road stations as far as Bangor are all in course of erection, as also the joint station at Chester, and with the exception of the latter will be completed this year.

From the above statement of our operations and progress you will perceive, that during the last six months very great and creditable exertions have been made by the various contractors, and that with the exception of the Britannia bridge, there will be no impediment to the opening of the line throughout, in the month of February or March next.

In concluding this report on the state of the works, I feel that you may, perhaps, expect some observations from me, respecting a letter which appeared in the *Times* a few days ago, with the signature of General Sir Charles Pasley, objecting in strong, and somewhat uncourteous, language to the method proposed to be adopted in the erection of the tubes at the Conway and Britannia bridges. The conclusions arrived at by the writer are so clearly based in ignorance of the proposed plans, that I abstain from making any comment thereon; indeed, I am precluded from doing so, since he merely indulges in random predictions without offering even the semblance of a reason for them.

For the satisfaction of the directors, I think it right to add, that nothing has occurred in any way to shake my confidence in the plan which we are preparing to carry out.

A general statement of accounts was presented, showing the total receipts as 2,051,886*l.* 12s. 6d.—The expenditure included 32,180*l.* 6s. 6d. for parliamentary charges; for land and construction, 1,775,753*l.* 8s. 3d.; among the incidental charges were—land agency, 2400*l.*; engineering, 28,612*l.* 6s. 2d.; solicitors, 7836*l.* 14s. 2d.; direction and auditors, 5500*l.*; resident director and establishment, 4141*l.* 4s. 6d.; secretary and general office, 4594*l.* 12s. 7d.; advertising, religious instruction fund, &c., 1936*l.* 11s. 2d.; interest to shareholders, 71,466*l.* 1s. 11d.; stamps, commission, interest, &c., 10,509*l.* 5s. 2d.; mold railway, 3150*l.*—leaving balance of 103,806*l.* 2s. 1d.

After some general observations, reference was made to the letters of General Pasley and "Mathematician," which appeared in last week's *Mining Journal*.

Mr. R. STEPHENSON, M.P., said,—I presume that all of you have read the letter signed "General Pasley," which has been alluded to. I have done so myself; and, having given it a very attentive consideration, I must say that I really cannot find anything in it that requires a reply from me. (Cheers.) He makes a statement—or rather gives a detailed statement—of conversations that took place between us at an early stage of the proceedings, in reference to the proposal for using iron tubes for bridges. He states that he then approved of such a mode of construction, and there is not one single paragraph in his published letter which at all involves the principle. He believes that the application of it will be effective; but what he does find fault with, is the change I have made in the erection. He does not in the least object to the principle—he still believes it is a good and sound principle. I repeat, it is to the proposed mode of erecting it that he offers his objections. Now, there are but two or three persons in this country to whom the arrangements for erecting the bridge are known. General Pasley cannot be in possession of any information that would justify him in making such predictions as he has indulged in. (Hear.) He declares in his letter, that any attempt to erect the bridge by means with which he cannot be acquainted, will be eventually followed by the falling of the tubes into the Straits. The plans of the method by which the tubes are to be raised and fixed are here, and I should have no hesitation whatever in exhibiting them to any person who could properly appreciate the mechanical arrangements; but I feel that gentlemen will quite understand me when I say, that I should not be able, in a meeting like this, to render intelligible such a complicated machine as that by which it is proposed to erect the bridge. Originally my intention was to put up chains, and build the tubes on a level with the platform of the railway, and to move the tubes along the platform, the platform being suspended by chains. This plan was, after due consideration, abandoned for another one—viz., that of raising the tubes up from below. I reiterate that it is to the mode only of raising the tubes to which Gen. Pasley objects, but of which mode he cannot know anything, the plans having been confined to not more than two or three individuals. I have taken the opportunity at various times of consulting the most eminent engineering and scientific men on the subject, and I am confident that the grounds on which apprehensions as to the perfect security of the bridge have been excited are general, vague, and, in fact, have no real foundation whatever. (Cheers.) Still, an idea is entertained that there is something precarious involved in the very novelty of it. I do not believe that there is anything precarious in it. The plan is the extension of a very old principle, though never employed on so gigantic a scale. General Pasley alludes in his letter to some general conversation that took place between himself and Capt. Moorsom, in reference to the plan for raising the iron tubes. Capt. Moorsom knows only the general features of the plan; but he is not acquainted with the details of the mode in which it is proposed to erect the structure. Again, I say that Gen. Pasley was not in a position to give an opinion on the plan; and I think it an uncalled-for proceeding on his part to come forward and raise an apprehension respecting an important work, which involves the company in a large outlay, and causes me, if I may be permitted to say so, much anxiety. (Cheers.) With regard to the other published letter, signed "A Mathematician," I can only say that it is a title which I think the person had no right to assume. (Hear, hear.) There is nothing in it that is not of the most general and vague character; and the theory upon which the writer proceeds is totally unfounded. He speaks of the wrought-iron bolts being converted into cast-iron, or that a change of structure may take place in the iron by the continual vibration of the bridge. This is pure assumption. These letters have not raised in my mind the slightest apprehension as to the entire success of the plan for the erection of the bridge, or as to the perfect security of the bridge itself. (Cheers.) Everything has been prepared with great care and deliberation, and I am fully convinced that no difficulty will arise, which we shall not be able to surmount. I shall always be upon the spot, and ready to devote my attention to whatever exigency may present itself. I never knew a great work like this completed, without some difficulty having to be surmounted; but I beg you to dismiss from your minds any fear respecting the result, for a very extensive series of experiments has formed the basis of the plan. Experiments, exceeding in magnitude any that were ever made previously, were carefully made, to test the soundness of it. I felt in doing this, that I was incurring a large outlay; but I considered it to be my duty to place the principle of the bridge on a proper and unquestionable footing. (Cheers.) I believe I have done so, and that the most eminent mathematicians, as well as engineers, agree with me, that the principle is a perfectly sound one. (Cheers.)

Capt. MOORSOM said, that perhaps the hon. proprietor, who had alluded to him, would accept his thanks, because the allusion had given the chairman an opportunity of speaking with so much kindness of his (Capt. M.'s) services. If the proprietors wished him to make his reports to them he would do so. It had been arranged that his reports should be made to the board, before whom any questions of importance involved in them were discussed. This practice had resulted in a very harmonious working, and to the promotion, as he believed, of the best interests of the shareholders. He could assure the proprietors, that there had not been wanting on his part any zeal or industry to fulfil the obligations he undertook when he became their resident director. He thought it right to state that he must have expressed himself very vaguely if he had given to General Pasley that idea of the raising the iron tube, which he had put forth in his letter. Certainly, in his (Capt. M.'s) own mind, he had a very different conception of the mode of raising the tube to what the general's letter expressed; and, therefore, he must have entirely mistaken what he (Capt. M.) endeavoured to explain to him. It was but a general conversation in a railway carriage that he had had with Gen. Pasley, and he thought that much stress should not be laid on the recollections of such a conversation. (Hear.) As far as he (Capt. M.) understood the plan, the mode of raising the tube was an exceedingly simple and ingenious one, and he thought entirely effective. As to the tube itself, and its power of resisting the vibration of railway trains, he had given the subject a great deal of consideration; and having had from the commencement frequent communications with Mr. Stephenson, and having had an opportunity of examining the Conway tubes (as the reporter understood), the top, bottom, and sides, he had no hesitation in saying his decided conviction was, that it was fully adequate for the purpose for which it was designed. He was not clear, he was not perhaps sure, that the tube might not have been made lighter, and some money saved; but he thought Mr. Stephenson had exercised a sound discretion in taking the safe side, and in making every part entirely secure. (Hear.)

Mr. TAYLOR said, that Mr. Stephenson had neglected to answer Gen. Pasley's objection, that he (Mr. S.) had abandoned the suspension principle.

Mr. STEPHENSON.—I wish it to be clearly understood that I never considered the chains as essential to the permanent support of the bridge. The purpose for which the chains were originally planned was to erect the tube, and not for the purpose of supporting it. After we had proceeded so far in our calculations, it became evident that by increasing the size, or rather the weight of the tube, the necessity of having chains would be obviated. I believe it is almost a settled matter that the chains with the tube would not give us an efficient bridge. With respect to the vibration, that is a matter of opinion, it is true; but I have a very strong opinion that the vibration will not be felt. When you come to put the weight of the tube against the weight of the railway trains that will pass over it, you will have to consider their ratio; and then ask yourselves, if a train of 100 tons in the tube will throw 1200 tons, which the tube will weigh, into violent vibration. The thing is totally impossible. If the case were reversed: if the train were to be 1200 tons, and the tube 100 tons, there might be some reason in the assumption that violent vibration would be caused. I think the structure will be as firm as a rock, and that the bridge will not vibrate at all—at least not perceptibly. My opinion is, that whilst the weight of the train bears so small a proportion to the weight of the tube, no injurious vibration can take place. Those who reason on this subject, I am satisfied, omit this consideration. With respect to answering or replying to letters on this subject, it was impossible for me to do so. I receive them almost daily. I had two this morning. To have attended to such communications, whether by post or through the newspapers, would have prevented any plans being carried out. (Hear, hear.)—Mr. BOOTHBY seconded the adoption of the report, which was carried unanimously.

It was resolved that 42,000 shares, of 15*l.* each, be created, and allotted *pro rata* among the shareholders; and the directors having been authorised to take steps in the ensuing session of Parliament to secure efficient steam-boat communication betwen Holyhead and Ireland, a vote of thanks was given to the chairman, and the meeting broke up.

WEST CORNWALL RAILWAY.

The half-yearly general meeting of proprietors was held, at the offices, Broad-street-buildings, on Tuesday, August 10.

EDWARD LEY, Esq., in the chair.

After the usual preliminary proceedings, the SECRETARY (Mr. F. Le Mesurier) read the

REPORT.

Since the last report your directors had the pleasure of submitting to you, they have to announce, that the bill for the construction of a branch railway to St. Ives, and for wharfs and quays at Hayle, has not received the sanction of the Legislature; the Board of Admiralty being opposed to a railway crossing the estuary, and the Committee of the Commons House, urging as an objection to the construction of wharfs and quays, that no railway company ought to become a trading company. The branch to St. Ives was proposed in consequence of a clause in the Special Act of 1846, rendering it compulsory on the company to go to Parliament for powers to construct a branch to Norwayman's Wharf, which would have embraced the most difficult part of the undertaking; this obligation having been fulfilled, no further expense is contemplated to carry out such extension.

Your directors regret to state, that scarcely half the call, due February 22d last, has been paid up, and to this cause must be attributed the delay in commencing the works on the line, which has been most carefully re-surveyed, on which the gradients have been been much improved; but without the certainty of ample funds at their disposal, your directors have not thought it prudent to enter into any contracts.

Your directors beg to call your attention to the state of the money market during the last six months, and the consequent effect upon most railway undertakings; and with reference to this pecuniary difficulty, their anxious attention has been directed to the best mode of disposing of the unappropriated shares in this company; they, therefore, call your attention to an agreement which has been entered into with Mr. Francis Mowatt, to take these shares, subject to confirmation by the shareholders at this meeting, on the following conditions—viz., Mr. Mowatt agrees to take up the unappropriated shares in this company, amounting to about 5000, and at a discount of 5*l.* per share, such discount to be payable when 15*l.* per share shall have been paid up, either in cash or by debentures of the company, having three years to run, at the option of the company; Mr. Mowatt agrees to pay the deposit and call, being 4*l.* per share, on the 5000 shares forthwith. Looking at the position of the company, with but half the last call paid up, proprietors willing, but unable for a time, to discharge their obligations to the company; under these circumstances, and with no immediate prospect of money becoming plentiful, your directors fearing to look for that guarantee from the public in 1847, which the prosperity of 1845 led them to believe would last, they cannot but recommend for your adoption the foregoing arrangement, which will place the company in a position to prosecute the undertaking with vigour; an arrangement calculated to maintain the independence of the company, an advantage which your directors consider a subject of grave importance to your interests.

The directors have been desirous of closing all liabilities of the company, up to the period that the Act received the Royal Assent, but have not been enabled to complete their labours in this respect, by reason of the solicitor's accounts requiring, in your directors' opinion, revision; and they have returned the same to them for that purpose.

Your directors have to announce the resignation of Mr. R. F. Gower as a director of this company, and the election in his place of Mr. Francis Mowatt.

A general statement of the receipts and expenditure up to the 30th June, was presented, showing the total amount received as 48,097*l.* 10s. The expenditure had been—preliminary, law, and parliamentary, 20,179*l.* 4s. 8d.; engineering and surveying, 9631*l.* 9s. 2d.; office expenses, and incidental charges, 1188*l.* 11s. 3d.; interest on deposits, 1630*l.* 14s. 7d.; paid on account of the liabilities of the Hayle Railway Company, 6271*l.* 1s. 5d.—leaving balance on hand, 6196*l.* 9s. 4d.

The following resolution was then submitted by the CHAIRMAN, for the approval of the meeting:—"That the provisional agreement entered into by the directors with Mr. Francis Mowatt, for the disposal of the unappropriated shares of this company, be confirmed, and that the directors be and they are hereby authorised to carry out and complete the same."

Mr. CHANTER said, that, before the resolution was passed, he wished to know what amount the directors had paid up, and what were the arrears still due by them. He heard that there was a considerable sum due to the company by the directors, and he should like to inspect the books, as the statement before the meeting he did not consider satisfactory.

The CHAIRMAN said, that the gentleman was utterly and entirely mistaken.

Mr. CHANTER then demanded to see the books.—The CHAIRMAN did not think the hon. proprietor had the power of requiring the production of the books.

Mr. CHANTER then proceeded to address the meeting upon what he considered to be a great personal grievance, which statement having been replied to by Mr. Louis Vigors, on behalf of the directors, it was decided that such a question was not one that could properly be discussed at that meeting.

Captain MOORSOM said, that, inasmuch as there were imputations and insinuations abroad in respect to the affairs of this company, he was anxious that they should be set at rest by a brief explanation upon one or two points. He presumed that there had been a purchase made of the Hayle Railway.

The CHAIRMAN said, there was an absolute purchase of the Hayle Railway by this company, for 80,000*l.*; they thereby incurred the liabilities of the Hayle Railway Company.

Captain MOORSOM understood that the Hayle Railway, even in its present defective state, was returning at the present moment an income to this company. He thought it would be satisfactory to know the amount of such income.—The SECRETARY said, about 14,000*l.* a year.

Captain MOORSOM said, he believed it was properly stated, that the calls of the directors had not been all paid up. Although, however, the proprietors were certainly much in arrear, this circumstance had not impeded the progress of the railway.

A PROPRIETOR asked whether Mr. Mowatt was connected with the Great Western Railway Company?—The CHAIRMAN—He is not.

Mr. CHANTER.—I wish to ask whether Mowatt is to pay the 20,000*l.* for the 5000 shares before another call is made on the company?

The CHAIRMAN.—Yes; this money is to be paid forthwith.

The resolution was then unanimously agreed to.—The report was received, adopted, and ordered to be printed for circulation among the proprietors. The register of shareholders, then produced, having been authenticated by the common seal of the company, the usual regulation of thanks to the chairman was agreed to, and the meeting separated.

CHARING-CROSS BRIDGE COMPANY.

The annual general meeting of proprietors was held on Thursday, the 12th inst., at the offices, Villiers-street, Strand.

The Right Hon. the Earl of DEVON in the chair.

Previously to taking into consideration the usual business, the noble CHAIRMAN observed that it was proposed to submit the report of the committee appointed by the special general meeting, on the 12th of last month, to investigate the accounts of the company. The document in question set forth that the committee had minutely investigated the affairs of the company, and ascertained that its liabilities amounted to 20,805*l.*: to meet this sum, they recommended the directors to advertise for loans on debenture, bearing interest at 5 per cent. per annum, and to issue new shares. Upon the question, that the report be received and adopted, a long discussion ensued, which terminated in the rejection of the report by 36 to 25. A resolution was then proposed, authorising the directors to raise 20,000*l.*, in order to discharge the liabilities of the company. Several proprietors contended that the debt to the bank, the payment to Mr. Jackson, and other items included in the liabilities, could be arranged without adopting the recommendation of the directors. The chairman ultimately put the motion, when there appeared—for the resolution 27, against it 32. A poll was then demanded by Mr. Hawes, jun., the deputy chairman, which was immediately taken, and the result was declared to be as follows:—For the resolution, 142; against it, 199: majority against, 57—the resolution was then negatived. The business of the annual meeting was then proceeded with.—The CLERK read the report of the directors, which stated that the amount of tolls received during the last half-year, justified their recommending a dividend of 4*l.* per cent. per annum; which dividend, however (in consequence of the determination of the meeting not to raise the 20,000*l.*), they could not sanction being paid to the shareholders. The directors proposed immediately to commence the access to the bridge from the North-road, in order to meet the requirements of the traffic expected to be realised after the great railway terminus was opened close to its southern approach. The report concluded by regretting the differences which existed between the directors of the market company, and the directors of the bridge company. The revenue account for the past half-year showed a total receipt of 6002*l.* 3s. 4d., against which were the following payments:—Half-yearly dividend, 1600*l.*; taxes and poor rates, 349*l.* 15s. 4d.; gas and income tax, 89*l.* 10s; sundries, including toll collectors' wages, 468*l.* 10s.; balance, 3443*l.* 6s. 9d. The general account showed a balance from revenue account of 3443*l.* 6s. 9d., out of which there was 2398*l.* 6s. 9d. available for a dividend. The toll collections on the bridge, for the past six months, had been—in February, 309*l.* 4s. 2d.; March, 587*l.* 17s. 1d.; April, 596*l.* 9s.; May, 637*l.* 4s. 2d.; June, 606*l.* 19s. 6d.; July, 667*l.* 9s. 1d.—3405*l.* 8s.

The report was adopted; and after some routine business, the meeting, which lasted several hours, separated.

LONDON, BRIGHTON, AND SOUTH-COAST RAILWAY.

The half-yearly meeting was held on Tuesday, the 11th inst., at the London Tavern. C. P. GRENFELL, Esq., M.P., in the chair.

The report stated, that the Epsom line was opened on the 10th of May, and the extension from Chichester to Portsmouth throughout on the 14th of June. The directors believe that the development of the traffic will justify the original expectations; the arrangements for the goods traffic are yet incomplete, and the stations at Portsmouth and Epsom unfinished; the lines to Lewes and Newhaven are nearly completed; that the Newhaven extension from Lewes will enable the company, by means of very superior vessels, to secure a full share of the continental traffic; that the sea passage will be made in about four hours; and that the railway from London to Paris will be shorter by 70 miles than by the Boulogne route. The line to Horsham is to be opened in about a month, and the branches to Hailsham and Eastbourne to be finished early next year. The double line of rails from Hastings to Portsmouth are now complete. Powers had been obtained in the late session to legalise the agreement with the South-Western Company, and to authorize a division and enlargement of the London-bridge station, the increased traffic rendering the present accommodation wholly inadequate. From the insufficiency of power by atmospheric traction to work the Epsom in addition to the Croydon traffic, locomotive power has been substituted, by the advice of the consulting engineer. The atmospheric apparatus has been in part disposed of. The very large expenditure in the locomotive department arises from the high price of fuel, the increase of wages for mechanics, and the greater number of miles travelled by the engines since the opening of the lines to Epsom and Portsmouth; but it is expected that they will shortly be enabled to work the extended lines more advantageously. The maintenance of the whole permanent way and works is now under contract to responsible parties. The traffic for the past half-year has been affected by the pressure of the times. The gross revenue for the six months ending the 30th June, including a reserve of 1074*l.*, was 184,073*l.*; the working and other expenses, including 13,178*l.* paid for interest on debentures, 6466*l.* rates and taxes, and 6453*l.* for Government duty, were 98,840*l.*, leaving a disposable balance of 85,233*l.* The capital account shows that 5,802,926*l.* had been received on capital and loan; that 3,314,368*l.* had been expended on the main line; and 2,344,543*l.* on the branches—leaving a balance of 143,745*l.*

The CHAIRMAN said, with reference to the smallness of the dividend, it arose in the first instance from the severe commercial difficulties experienced during the past six months; and, secondly, from the circumstance of working over lines 166 miles in length, upon 56 miles of which the traffic has only been developed—the remainder being 110 miles of new railway actually paid for, and, therefore, forming a charge upon the concern in working, and on the amount appropriated for dividend, spreading it over an increased capital. He stated that the mileage travelled over by the engines during a period of six months, ending June, 1846, was 305,000 miles, but the number of miles travelled by engines for the corresponding period of 1847, was 588,000 miles—so that, although there was an increase of 280,000 in mileage travelled, there has been a loss during the same period in passenger traffic on the main line of 10,000*l.* The diminished dividend in the present half-year may be in a great measure ascribed to a misfortune against which no human foresight could provide: he hoped that he had satisfactorily accounted for the circumstances under which they were enabled to declare only a dividend of 2 per cent., instead of a dividend of 5 per cent., which was declared at the corresponding period of last year. He did not entertain the slightest doubt that, when the traffic on the new lines became developed, the undertaking would pay a remunerative dividend.

Resolutions were passed adopting the report, agreeing to the dividend of 2 per cent. for the half-year, authorising the issue of shares to raise 82,057*l.*, and also to convert into stock the shares on which 5 per cent. preference interest had been abandoned, to affix the seal of the company to the new bye-laws approved by the railway commissioners, and appointing an auditor in the room of one who had resigned.

SCOTTISH CENTRAL RAILWAY COMPANY.

An adjourned special general meeting of this company, held in pursuance of the resolution adopted at the special general meeting of July 20, took place in Perth, on Thursday, the 5th instant, for the purpose of hearing the report of a committee appointed at last meeting for the consideration of the legality of the agreement entered into with the London and North Western and Caledonian Railway Companies, and also the terms offered by the Edinburgh and Glasgow Railway Company for amalgamation, and for resolving thereupon.—Lord DUNCAN (vice-chairman of the company) in the chair.—The report of the committee was read, which recommended that the agreement with the southern companies should be abandoned, and an amalgamation entered into with the Edinburgh and Glasgow. The committee also stated their opinion, that it was not for the benefit of the Scottish Central that Mr. Locke should be continued as their engineer.—Mr. CRAWFORD, in a long speech, went over the grounds of objection to the agreement with the southern companies, which were fully argued at last meeting, and concluded, by moving to the effect of the report, which was seconded by Mr. ALLAN, sharebroker, Edinburgh.—Mr. ROBERTSON (one of the directors), in a speech of upwards of an hour's duration, explained the nature of the whole transaction with the English and Caledonian companies, and pointed out the advantages to be derived from that connection, in preference to an amalgamation with the Edinburgh and Glasgow, and moved, as an amendment, that the agreement with the southern companies was for the benefit of the Scottish Central; and that, in the meantime, it is inexpedient to enter into terms with any other companies.—This was seconded by Mr. DA-

VIDEON, agent for the Marquis of Breadalbane.—The meeting was afterwards addressed by Mr. Oppenshaw (of Manchester), Mr. Bruce (of Kennet), Mr. Fox Maule, who declared he would give every opposition in Parliament to an amalgamation with the Edinburgh and Glasgow, and others; and a show of hands being taken, a scrutiny was demanded, and at half-past four the scrutineers retired. In the meantime, an adjournment of the meeting took place; and, on their re-assembling in the hall at half-past eight, Lord DUNCAN read the statement of the scrutineers, declaring the directors to be in a majority of 1307.—The state of the poll was as follows:—For the committee's report, 5604; against it, 6911—majority for the directors, 1307.—After passing the usual vote of thanks to the chairman, the meeting separated.

ROYAL BANK OF AUSTRALIA.

The annual meeting of this company was held at the Bank, Moorgate-street, on Wednesday. J. N. SUTHERLAND, Esq., in the chair.

It appeared from the report, that the gross profit on the year's transactions was 30,983*l.* 19s. 7d. The surplus fund was 29,821*l.* 5s. 9d., from which would be deducted 1000*l.*, for preliminary expenses, and the forthcoming dividends (at the rate of 6 per cent. per annum), amounting to about 7000*l.* The want of labourers was great in the colony. The land tenure question had been settled, which enabled the settlers to hold land permanently. The report was adopted. Benjamin Boyd and George Webster, Esqrs., were re-elected directors. A vote of thanks was passed to the directors at home and abroad, and to Mr. Wray, the manager, when the meeting adjourned.

LONDON AND NORTH-WESTERN RAILWAY.

The usual half-yearly meeting of shareholders took place at the Euston-square station, on Friday, the 13th inst.

GEORGE CARR GLYN, Esq., M.P., took the chair at 12 o'clock.

The usual preliminary proceedings having been gone through, and the minutes of the last meeting read and adopted,

The CHAIRMAN said, before the report was read, he was anxious to make a few observations. He thought the company had given to the public all the advantages of competition; but, if that principle was carried on, it would be found, that where combination was possible, competition would be found to be impossible. The public safety would be endangered thereby, because no person would be found in railway companies to keep them up to that perfection, which they had hitherto attained. (Cheers.) The accounts of the company were before the proprietors; there was a great falling off, he was sorry to say, of the passengers traffic of the company for the first half-year. In first-class passengers alone there was a falling off of 16,400*l.* In the second-class a small increase had taken place; but in third-class passengers, there was a falling off of 38,345*l.* There was a great deduction under the head of horses and carriages, and live stock. There was a great increase in the rates and taxes. The worthy chairman, after alluding to the bills in which they had been successful, and those in which they had failed, in the late Parliament, stated that it was not the intention of the directors to proceed hastily with any of the measures for which they had obtained the sanction of Parliament. The regulations of Parliament had forced upon them the course they had pursued. This company had been anxious for a settlement of all the differences between all companies; and he hoped the time was not far distant when they would all pull together, and every railway company have an opportunity of looking into its own concerns.

The SECRETARY (Mr. G. Creed) then read the report, which, after taking a review of the proceedings of the company for the half-year, and the works that had been carried on during that period, recommended a dividend of 4½ per cent.

The report was unanimously agreed to, as were also resolutions for the half-yearly dividend of 4½ per cent., after a few observations from some of the proprietors.

In answer to a question from a proprietor,

The CHAIRMAN said, that the proprietors might expect but a small increase in their dividends next half-year. With respect to the Oxford and Birmingham line, all the company asked for was, that it might be a second line for them into Birmingham. Their object in this was to prevent an immense outlay of the capital of this company, and that was the whole secret of the proceedings of the directors of this company.

Mr. CROSSFIELD said, that it had been decided that it was not illegal for the proprietors of that company to possess shares in the Oxford and Birmingham Company; and he trusted, therefore, that the proprietors would increase the number of shares which they at present possessed.—Thanks were unanimously voted to the chairman and directors, and the meeting separated.

SLIGO AND SHANNON RAILWAY COMPANY.

A general meeting of proprietors was advertised to take place yesterday at the offices of the company, Winchester-house, Old Broad-street; but after waiting until 1 o'clock, a sufficient number of shareholders not attending to form a legal meeting, the parties separated, without any business being transacted.

CALEDONIAN AND DUMBARTONSHIRE.—An ordinary meeting, at which a short report was read, stating that contracts had been made, providing for the opening of the line on the 1st July, 1849—agreed to.

EAST LANCASHIRE: half-yearly; a bill for purchasing the Louth navigation for 29 years, at 1500*l.* per annum, had received the Royal assent. Report adopted, and was favourable.

EASTERN COUNTIES AND NORTHERN AND EASTERN: half-yearly meeting; notwithstanding Mr. Hudson spun a very long yarn in the endeavour to justify the directors in the depreciation of this property, and the declaration of a dividend of only 10s., and notwithstanding he promised them an increase of profit next half-year of some 80,000*l.* or 90,000*l.*, shares are down 1*l.* per share.

GLASGOW, PAISLEY, KILMARNOCK, AND AYR: special meeting to authorise the raising additional capital in conjunction with the Glasgow, Dumfries, and Carlisle Company, and raising the number of directors of the former to 15—report agreed to. A meeting of the latter company also took place for the same object, and similar resolutions were agreed to.

GREAT NORTHERN: half-yearly meeting; the report stated, that although all their bills had had great opposition in Parliament, the session was altogether favourable; the cost up to the time of meeting had been 1,012,902*l.* 5s. 5d.; they had obtained an extension of 70 miles, for a further outlay of 400,000*l.*

MIDLAND: half-yearly: the balance in hand was 242,607*l.*, which allowed a dividend of 3*l.* 10s. per share on the consolidated stock, and the same on the preferential. The electric telegraph was nearly complete from Birmingham to Gloucester; and the company had laid out large sums in locomotive engines and carriages, besides 1640 mineral and cattle vans.

NEWMARKET: half-yearly; receipts 172,306*l.* 16s. 1d., and expenditure 148,761*l.* 12s. 3d.

READING, GUILFORD, AND REIGATE: half-yearly meeting; this line is now incorporated with the South Eastern; the receipts had been 157,760*l.* 17s. 9d., and the expenditure 39,121*l.* 17s. 2d.—report adopted.

YORK AND NEWCASTLE AND NEWCASTLE AND BERWICK.—It was decided that the amalgamation be agreed to, under the title of the York, Newcastle, and Berwick. The Royal assent has been obtained to all the bills applied for, and the traffic was improving.

YORK AND NORTH MIDLAND: half-yearly meeting: all the bills applied for by this company had received the Royal assent, and the traffic had also greatly increased.

WHITEHAVEN JUNCTION: half-yearly meeting; this line has only been open three months, yet declared a dividend of 4½ per cent.; the expenditure has been 130,000*l.*

RAILROADS AND THE ELECTRIC TELEGRAPH IN ENGLAND AND AMERICA.—In his "Letters from Europe," at present in the course of publication in the *New York Herald*, the editor says:—"I have now been nearly three weeks in England, and in that time have travelled from one end of the country to the other—from the British Channel in the south, to the head of the Murray Firth in the north—from Southampton to Inverness. In that time, also, I have spent the last week in London. Travelling throughout England is reduced to morning excursions—or at most to those of a day's length. You can touch the two extremities of the realm, in either direction, in the brief compass of a day. Railroads have made greater progress here than in the United States; but we are far ahead of them in electricity, as yet."

THE RAILWAY KING—MOSES AND THE DEAN.—An amusing story is told of him, which illustrates the quaint abruptness of his mode of address. During one of his years as office of Lord Mayor of York, the annual meeting of the British Association for the Advancement of Science was held in that city; and, at the close of the proceedings, it was the desire of the corporation to invite the most distinguished visitors and scientific professors to a dinner—the Right Honourable George Hudson being, of course, the mouthpiece of their courteous intentions. It happened, however, that, in the course of the proceedings of the meeting, the advancement of science had been somewhat impeded by some rather unscientific misunderstandings. During many years past, we need scarcely remind our readers, that time-honoured pride and recreation of the ultra-orthodox of all creed, the *odium theologicum*, has been for a time supplanted in some pious breasts by another source of spiritual warfare. As modern inquirers, and hardy reasoners, have made progress in one particular branch of physical science, the old odium has been fairly superseded and driven out of the field of controversy by another kind of hatred, which may be called the *odium geo-logicum*. The city of York, too, is rather dangerous ground for the introduction of any such subject; for we need not observe that the worthy dean of the diocese, Dr. Cockburn, has acquired a widely-extended reputation by his many manful battlings against too speculative professors, who would bring their antediluvian relics and profane speculations thereon to bear against the buttresses of the faith and the Church. Imminent was the danger of exploding them, when some of these gentlemen came and perpetrated their grave theorism even within sound of the cathedral bells! A spark was enough, and local history tells that the disturbance was terrific. What it must have been may be guessed from the fact, that, when the time came for the corporation to invite some of the belligerent professors, a grave difficulty arose, because such had been the personalities that it was impossible for the geologists to meet each other at the dinner. Which side was to give way? Many were the suggestions and proposals, in the hope that some mutual arrangement might be made. But who would attempt, or could effect, a reconciliation under such circumstances? Not Mr. Hudson. With his usual determination, he cut the Gordian knot at once; for he brought the affair to a close in a summary way, when officially communicating with the opposite parties, by saying, with characteristic straightforwardness, "Why, gentlemen, I'm really very sorry, gentlemen, the affair can't be arranged, gentlemen; but," smiling and bowing, "the fact is, gentlemen, I've talked the thing over with the corporation, and—we've decided for Moses and the dean!"—*Fraser's Magazine.*

INCRUSTATIONS IN BOILERS.—In a communication on this subject, in a contemporary, the writer draws attention to the value of muriate of ammonia, by which the solid deposits of carbonate and sulphate of lime are rendered soluble, and ultimately dissolved. Our readers will remember that Dr. Ritterbandt discovered this remedy, for which he obtained a patent; but as yet there is much apathy among acting engineers, particularly of marine engines, through the hereditary prejudice in the minds of those individuals connected with the management of steam-engines, precluding the assistance of any reform extraneous to that suggested by their own peculiar clique. The writer suggests the absolute necessity of persevering in practical experiments, to ascertain precisely the extent of injury the dilute muriate acid does upon the iron of the boiler, and whether it is any way injurious, in comparison with the benefit of prevention it confers.

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The Peninsular and Oriental Steam Navigation Company BOOK PASSENGERS for CEYLON, MADRAS, and CALCUTTA direct, by steamers leaving Southampton on the 20th, and for Alexandria, *en route* to Bombay, on the 1st of every month. 62
A steamer from Southampton leaves the 1st and 20th of every month for Malta, whence are steamers to Naples, Genoa, Civeta Vecchia, three times a month.
STEAM TO CORUNNA, OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.
A steamer leaves Southampton on the 7th, 17th, and 27th of every month.
Apply at the Peninsular and Oriental Steam Navigation Company's offices, 51, St. Mary Axe, London, where only passages can be secured throughout.

EAST COOMBE SILVER AND LEAD MINING
COMPANY—In 4096 shares, at One Guinea per share.
CONDUCTED ON THE COST-BOOK SYSTEM.
BANKERS—The National Provincial Bank of England, Barnstaple. 63
SECRETARY—Mr. George Chowen.
The mines possessed by the company extend upwards of 800 fathoms on the run of the lodes, and about 200 fathoms in a cross direction, situate in the parish of Swymbridge, near Barnstable, being held under a lease of 21 years, at 1-15th dues. The lodes are parallel with those of the Combmartin Mines, and in every respect similar in their component parts, matrix as well as country (which latter is a kindly killas), and may be worked at an easy cost. The operations of the present company have been confined for the past two years to clearing up the old workings, sinking engine-shaft, extending levels, &c.; but it being deemed essentially necessary to erect a steam-engine, with the view of putting the mine to a greater depth, as also proving the north lode, it has been determined to extend the number of shares to 4096, with a payment of One Guinea per share, a considerable proportion of which will be taken by the present proprietors. It may be observed, that the mines may be worked for the next six or eight months without the aid of steam-power, there being a good water-wheel erected, but which can only be partially applied, from the top water falling off; during which time the north lode (the most promising one in the sett) can be intersected at the 10 and 20 fathom levels, and driven on at those points. The adventurers have lately secured a valuable addition to the sett, which considerably enhances the value of the property.
In working the mines, it is intended to adhere strictly to the Cost-book System; a finance committee being appointed, who will have control over the funds of the company, and see to their proper application; such committee to be appointed at the first meeting of the adventurers, and remain in office two months, when they shall be required to furnish a cash account of receipts and expenditure, as also the assets and liabilities, thus precluding the possibility of any adventurer being rendered liable beyond the two months' cost. The committee so appointed to be eligible to be re-elected, or others appointed in their stead, at any two-monthly meeting. The ore hitherto raised has been rich for silver, its value being £15 to £20 per ton. The mine is in a good working condition, with water-wheel, flat-rods, pumps, &c., the value of the machinery being estimated at £1200.
Parties who may take shares in the company, will have them free of any liabilities up to the present time.
The annexed report of Captain Williams, will convey general information as to the prospects which the mine presents.

REPORT.
I have inspected the East Coombe Mine, and beg to hand you my report. The mine is located in a stratum of rich blue killas. The lodes are parallel to those of the celebrated Combmartin Mine, and in similar strata of ground. A considerable quantity of ore appears to have been taken from the south lode. In the bottom of the 10 fathom level, a good branch of silver-lead ore is going down, and I have no doubt of your having a course of ore in this lode at the next level.
The north lode, however, in my opinion, is the most kindly one in the sett. The indications at the adit being of the most encouraging nature, I strongly recommend this lode being cut, with all possible dispatch, at the 10 and 20 fm. levels; and I confidently believe you will find it rich when intersected. The machinery is in first rate order, and well laid out. It is my firm conviction, that if a steam-engine were erected, and the working vigorously prosecuted, considerable returns might at once be made. J. WILLIAMS.

Applications for shares to be made to J. P. Gilbert, Esq., Manager, National Provincial Bank, Barnstaple; Mr. John Westacott, East Coombe Mining Office, Swymbridge; and the secretary, Mr. George Chowen, from whom prospectuses may be had.

PORTER'S PATENT ANCHORS.—An anchor of 55 cwts., on Porter's plan, was tested at Woolwich Dockyard, on Thursday last, by special order of the Admiralty, for service on board his Imperial Russian Majesty's frigate *Pallas*, of which the Grand Duke is an officer; and, upon the late visit of his Imperial Highness to this establishment, the large store of these anchors, always kept in readiness to supply the constant demands for our service, arrested the prince's attention, and particularly one of 99 cwts., then lying on the wharf ready for shipment, and now on board her Majesty's ship *Queen*, occasioned a discussion of nearly half an hour upon its various merits and advantages, which were explained to his Highness and suite, by the professional officers in attendance. This anchor was subjected to the test of an ordinary anchor one-third heavier in weight, which it bore without showing the least symptoms of distress, and offered a striking contrast to the three anchors on Sir W. Parker's plan, respectively 85, 82, and 76 cwts. each, now lying disabled upon the wharf, and which yielded at a less strain than was borne by this comparatively small anchor of 55 cwts., on Porter's plan, but intended to do the duty of an ordinary anchor one-third heavier; and it is asserted by many officers of the Royal Navy, who have practically used them for years, to be more efficient at even half the weight of other anchors.

GREAT CASTINGS.—The New York papers record the casting of the bed-plates for the engines of the steam-ship *United States*, one of the contemplated line of packets between New Orleans and Liverpool. About 27 tons of iron were melted, and the plates, when dressed off, will weigh some 24 tons: the cost of the engines will be $115,000, and the ship will be a splendid vessel of 2200 tons, and over 1000-horse power.—Since the above, the bed plate for the Bremin line steamer, *Lafayette*, has been cast at the Novelty Works; this is the largest plate ever cast for steamers, being 3 or 4 tons heavier than the *United States* plates. It was all done quietly, the iron melting in about three hours, and the running into the mould in two minutes.

THE "SHAMROCK" STEAMER.—On Thursday last the new iron steam ship *Shamrock*, of 700 tons burden, and 350-horse power, intended for the Glasgow and Londonderry and Sligo trade, made a trial excursion; and, we are happy to learn, gave entire satisfaction to her builders and owners—a party of whom were on board. The vessel was constructed on a model so as to combine light draught of water with steadiness and capacity for stowage—objects which seem to have been completely realised. Her engines work remarkably smooth, there being little or no vibration felt in any part of the vessel; and, judging from the trial that has been made, her speed will be equal to any steam ship afloat. Altogether she is an admirable vessel, and bids fair to raise still higher the fame of her celebrated builders, Messrs. Caird and Co., of Greenock, who built the hull, constructed the engines, and fitted and completed the vessel ready for sea. We observe the *Shamrock* takes her berth on the station on Wednesday next, and we wish her and the enterprising company, the Glasgow and Londonderry Steam-Packet Company, to whom she belongs, all success and prosperity.—*Glasgow Examiner.*

THE "GREAT BRITAIN."—Captain Claxton, R.N., under whose directions and superintendence the operations directed to the liberation of this steamer have been conducted, in a letter to the editor of the *Newry Telegraph*, says, he has scarcely any doubt as to the vessel being ready to float on Friday (yesterday) when there is a reason to hope she may leave the bay, in tow of the *Birkenhead* man-of-war, which reached Dundrum Bay on Tuesday morning. Upon her arrival, Mr. Bellamy, with 60 of the dockyard men under his command, was placed on board the *Great Britain*. We were favoured last evening with the following particulars, which will, no doubt, prove interesting to our readers:—This noble ship has now, by the successful plans and exertions of Messrs. J. Bremner and his son, A. Bremner, civil engineers, been raised out of the sand to the requisite height, so as to enable the boiler-makers to get on with tightening the bottom at low water. The successful mode adopted was—first, 40 large baulks of timber were put alongside of the ship, vertically; in the upper ends of these baulks were put large sheaves or pulleys; pulleys were also attached to the ship, through which sheaves or pulleys large chains were put, and 20 large boxes, or caissons, attached to these chains; in each of these boxes were about 30 tons of sand. The lower ends of the baulks being on the rock, and pulleys in their upper ends, made the ship rise as the boxes descended. In addition to the lifting power of the boxes of sand were very powerful levers, and also screws, which were applied as follows:—Three immense levers were put at the foot of the stem, capable of lifting 200 tons; immense levers were placed along each side, opposite the timber bilge keels, thus giving a leverage of about 200 tons on each side. In addition to the preceed, all possible buoyancy has been given to the ship. Screw-power of 200 tons has been placed upon a strong platform, supported by 20 strong end-wood shores. By the means already mentioned, this monster ship might be lifted much higher, but that is unnecessary. The great difficulty—namely, the lifting of the ship out of the sand, being now so successfully overcome, all that is wanted is a few good tides and some good weather, when there is every possibility of the ship getting off. The boxes formerly used with sand are now being fixed to the stern to assist the ship's displacement. Two of her Majesty's steamers are to be in attendance to tow the *Great Britain* to Liverpool. One of them, the *Birkenhead*, is already in the bay, and landed a number of men, with their officers. The directors have taken the precaution to send Mr. Paterson, who is immediately connected with the lines of the ship, to inspect various places whereon the *Great Britain* may be laid without any risk of straining. Mr. Paterson remains by the ship for this purpose. It is fully expected, should the weather prove favourable and the tide sufficiently high, that the ship will be got off on Friday (yesterday.)—*Liverpool Mercury.*

GENERAL MINING MART AND CLUB HOUSE,
LONDON.
The MINERAL PRODUCTIONS of the WORLD are computed to be of the annual value of upwards of £64,000,000—one-half of which is raised in Europe alone. But facts regarding mining and geology, with the most approved modes of analysing and profitably separating mineral products—the results of practical experience—have no common concentration or abiding place; nor have mining results, varying, as they confessedly do, with the variations of the strata, any acknowledged repository beyond the shelves of a few provincial institutions.
LONDON—the focus of business appertaining to the empire and the world—the seat of most mining companies, and where almost all of them receive support and encouragement—has no public institution—no *locus standi*—to which the shareholder, the agent, the inventor, the practical miner, or the possessor of valuable mineral property, can have access to, either to afford or obtain information.
It is proposed, therefore, to form an institution in London, to be called— 64
"THE GENERAL MINING MART AND CLUB HOUSE,"
accessible to members on payment of £4 4s. per annum. From and after Christmas next, an entrance fee of One Guinea will be required beyond the subscription.
The advantages to be derived from the institution will be these:—
The letters of every member will be received there, and his address in London always known to his family and other correspondents.
He will have a place to transact his business, make and keep his appointments, write his letters and post them; and, for these purposes, there will be private boxes, as well as public rooms.
There will be all the mining and leading journals of the day, with such other interesting publications as shall be decided on.
The refreshments will be charged at little more than cost price—being a saving of full 25 per cent.—and no fees will be payable to servants. Every facility afforded for going to and from the railway trains, and for visiting places of business and amusement in London.
In fine, this institution will afford to the member, as soon as he reaches London, the means of finding himself in the society of his friends, or others of congenial taste, with all the ease, but less expense, of an inn. It will be open to *one and all* of its members, combining all the conveniences of a club, but independent of all political, party, national, or local feeling.
For mining business appropriate rooms will be set apart, and every facility afforded in the formation and extension of mining companies—the conduct of their business—the holding their annual or other meetings, and the sale and purchase of shares. The charges for these will be on a regulated and moderate scale, and will only concern those who shall desire the transaction of such business.
No responsibility of any kind is to be incurred by the member beyond the amount of his annual subscription; and he may withdraw at any time by giving half-a-year's notice, and paying up his subscription to the proposed time of quitting.
It is confidently expected that, in addition to the ordinary members, support will be given to this institution by the noblemen and gentlemen resident in, and representing, the counties and boroughs in the mineral districts, as also by the lords of the mineral soil generally, and by parties who have greatly benefited by mining, and possess mining influence. As the avocations of these noblemen and gentlemen will undoubtedly preclude the favour of frequent visits, it is trusted that they may still honour the proposed institution with their patronage and support, by becoming Life Honorary Members, paying a present subscription of Ten Guineas in lieu of all annual subscriptions, which will entitle them to all the advantages of the institution, and constitute them, *ex facto*, members of the committee, should they desire it.
Subscriptions from mines will entitle any one of their accredited proprietors or agents to the advantages of the institution.
Letters for further information and applications for admission to be addressed to Mr. J. G. Beckerleg, 18, Cornhill; to Messrs. Crossman, Sommers, and Co., 26, Threadneedle-street; or to Mr. R. Trodhnick, Three Kings'-court, Lombard-street, London, where detailed prospectuses may be obtained; prospectuses can also be had at the *Mining Journal* office, 26, Fleet-street.

ELBOROUGH SILVER-LEAD, CALAMINE, AND
BARYTES MINE.—PROSPECTUS.
This MINE is situated in the parish of HUTTON, Somerset, within four miles of Weston-Super-Mare, and Uphill Quarry, and 3½ miles of the Banwell station, on the Great Western Railway, is divided into 256 shares, and managed on the Cost-book System. The sett, which comprises 800 fathoms in length and 400 fathoms in width, contains a great number of lodes, which have proved very productive as far as they have been wrought.
It is well-known that for centuries past large quantities of lead ores have been raised by the system of gruffing, a rude sort of mining of the district, and parties so working, obtained large profits, although paying at the rate of 1-6th and even 1-4th to the lord, as dues or royalty. But, although this sett has been a very productive one, even by the rude operations of the gruffers on the backs of the lodes, and within a few fathoms of the surface, yet for want of more mining experience nothing has been done effectually in proving the lodes; traces of the gruffer's operations are visible for several hundred fathoms in length, and the rubbish, or waste deposits therefrom, on the surface, sufficiently indicate that large returns may be expected, if these mines are properly worked.
The report of the neighbourhood induced the present company in May last (1846) to solicit a grant of the sett; and having obtained it at moderate dues, they commenced clearing up the old workings in several places; and having fully satisfied themselves of the value of the sett, they have commenced sinking two new shafts, in order to get under the old workings, and to effectually work the mine—one of these shafts is on a perpendicular lode, having six other lodes underlaying towards it, and which, if they continue their present underlay, will all be intersected within the depth of 60 fathoms from surface.
The other is on a lode from which several tons of lead have been raised by the present company, from the old workings, which on this lode have been prosecuted to the depth of 20 fathoms, leaving a course of lead now in the bottom—but having been wrought in such a zig-zag manner, they are unfit for the purpose of mining advantageously; this shaft is, therefore, being sunk east of these workings in whole ground.
It is the general opinion of miners acquainted with the locality, that this mine can be prosecuted to the depth of 100 fathoms, without the aid of a single pumping-engine; and this, with other advantages connected with the concern, justify the proprietors in stating, that in their opinion the outlay of a comparatively small capital will bring the mine into a profitable state of working.

REPORTS.
TO MR. R. VIVIAN, TUCKINGMILL, CAMBORNE, CORNWALL.
SIR,—I have been a resident in this part for the last eight years, and have traversed this mineral country from the Bristol river to Wells, which is about 30 miles north and south, and from Bath to Bridgewater river, which is about 40 miles, east and west, and have, in so doing, examined very carefully the geological and mineralogical position of those localities, and find they are composed of mineral or mountain limestone, old red sandstone, new red sandstone, lias, penant, magnesian limestone, and conglomerated limestone, quartz, fluor-spar, silex, and jasper; there are hundreds of lodes and veins in this range, which carry metallic and mineral ores, such as lead, iron, copper, manganese, calamine, barytes, pyrites, reddle, antimony, coal, yellow ochre, and white lead ores.
Having heard that there were some of my countrymen at Elborough, near Banwell, working a mine, I went to see them on Tuesday, and found Capt. Trevithick and his pare dressing lead and calamine; Capt. Trevithick asked me to walk around the mine with him; I went underground at Vivian's shaft, and saw Vivian's lode, 17 fathoms deep, nearly perpendicular—a very kindly lode, 2½ ft. big, composed of flookan, elvan, and lead—good saving work. At Chapman's shaft a strong lode, and very kindly north lode: there are several lodes south of Vivian's lode, and underlaying north, which I think are likely to drop in and improve this lode in depth. I think this altogether a very promising mine. It is in the mountain limestone that this mine is, and it is in the mountain limestone that the principal British lead mines are situated, and they are those of Somersetshire, Derbyshire, Yorkshire, Cumberland, Shropshire, Flintshire, and Denbighshire—these are the most productive for lead and calamine.
The lead mines in Cornwall and Devon are in primitive rock, so that the Cornish and Devon miners in general know but little about limestone formation.
I think Somerset will make a great mining district, some day. I have an account of a little mine that paid in 1812, £808 15s. 10d. for dues; and take the average, they were no more than 15 fathoms deep, and they rose hundreds of pounds' worth, 8 or 10 fathoms deep; this mine is four miles east of Elborough Mine. THOMAS ROBARTS.
Oatland's Cottage, Wrington, near Bristol, Somerset, May 6.

SIR,—In compliance with your wish, I hereunder hand you a few remarks on the present appearances and future prospects of Elborough Mine.
This mine is situated on Elborough-hill, in the parish of Hutton, and about three miles distance from Banwell station (Great Western Railway); the set extends nearly a mile on the course of the lodes (eight or nine in number), nearly the whole of which have been worked on the backs, by the old men, and from the appearance of the work done, great quantities of lead have been raised.
I find your operations are at present confined to sinking a shaft on the course of Vivian's lode, which appears to be the principal one, and most regular in its course, nearly perpendicular—its longitudinal direction is about 10° south of east; this shaft is sunk 16½ fathoms from surface, at which point the lode is 2 feet wide, composed principally of light-coloured flookan, spar, and calamine, impregnated with lead throughout—a very kindly lode, indeed; I would strongly recommend you to get down this shaft with all possible speed, bearing in mind there are four or five lodes to the south of this, dipping towards the lode you are now sinking on; should they retain their regular course and underlay, you will have the junction of these lodes in the shaft, within the depth of 60 fathoms; when down about 16 fathoms from surface with this shaft, they cut into a large cavern, which has been made into a good whim-plat—here an end was begun, driving east of shaft, where the lode is at present small—composed of flookan, spar, and lead. I would also recommend you to place four men in this end, as it is my opinion that the whole of the lodes in this part approximate, and form a junction between 20 and 30 fathoms further east than you now are—this being done, you will fairly prove this part of the mine; from the favourable state of the ground, a great quantity can be developed in a short time; should it continue as it now is, the cost for driving or sinking will not exceed 60s. per fathom.
On Chapman's works the lode has been laid open about six fathoms deep, where it is 3 feet wide, composed of barytes, calamine, and beautiful spar, intermixed with lead—a very promising lode.
Further north still, about 60 fathoms, there is a parallel lode with the one last mentioned; this lode has been wrought on 14 fathoms deep, where it is 2 feet wide—composed of barytes and a little lead; Capt. Trevithick informs me the returns from this place have been equal to the outlay; these works are for the present suspended.
Before I conclude, I beg to observe, that it is my opinion, from the congenial strata in which the lodes are imbedded, and the promising appearance of the lodes at this smallow depth, that you will at no distant period have a profitable concern. F. C. HARPUR.
Mendip Hills Mines, May 5, 1847.

IMPORTANT TO RAILWAY COMPANIES.
PATENT KAMPTULICON COMPANY, 18, CORNHILL.
This company having completed their new factory, are prepared to supply railway managers and contractors with an elastic material (perfectly non-absorbent) to place between the rails and sleepers, and between the frames and bodies of carriages, to prevent jarring, and, consequently, wear and tear. The elastic planking is strongly recommended to be used for the backs and sides of carriages, to prevent splinters when accidents occur.
By order of the board, P. G. GREVILLE, Secretary.

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